CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

HAṬHA-YOGA

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The Author.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

HAṬHA-YOGA

An Advanced Method of
Physical Education and Concentration

by
PROFESSOR SHYAM SUNDAR GOSWAMI

With Foreword by
ELIS BERVEN

Professor Emeritus of Radiotherapy, Former Chief of
Radiumhemmet, Stockholm, Vice-President
for the European Section of Union
Internationale contre le Cancer

(*with 123 illustrations*)

L. N. FOWLER & Co., Ltd.
Stuart House
1 Tudor Street, London, E.C.4

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh
© S. S. GOSWAMI, 1959

Printed in Great Britain by
The Camelot Press Ltd., London and Southampton,
for L. N. Fowler & Co., Ltd., Stuart House,
1 Tudor Street, London, E.C.4

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

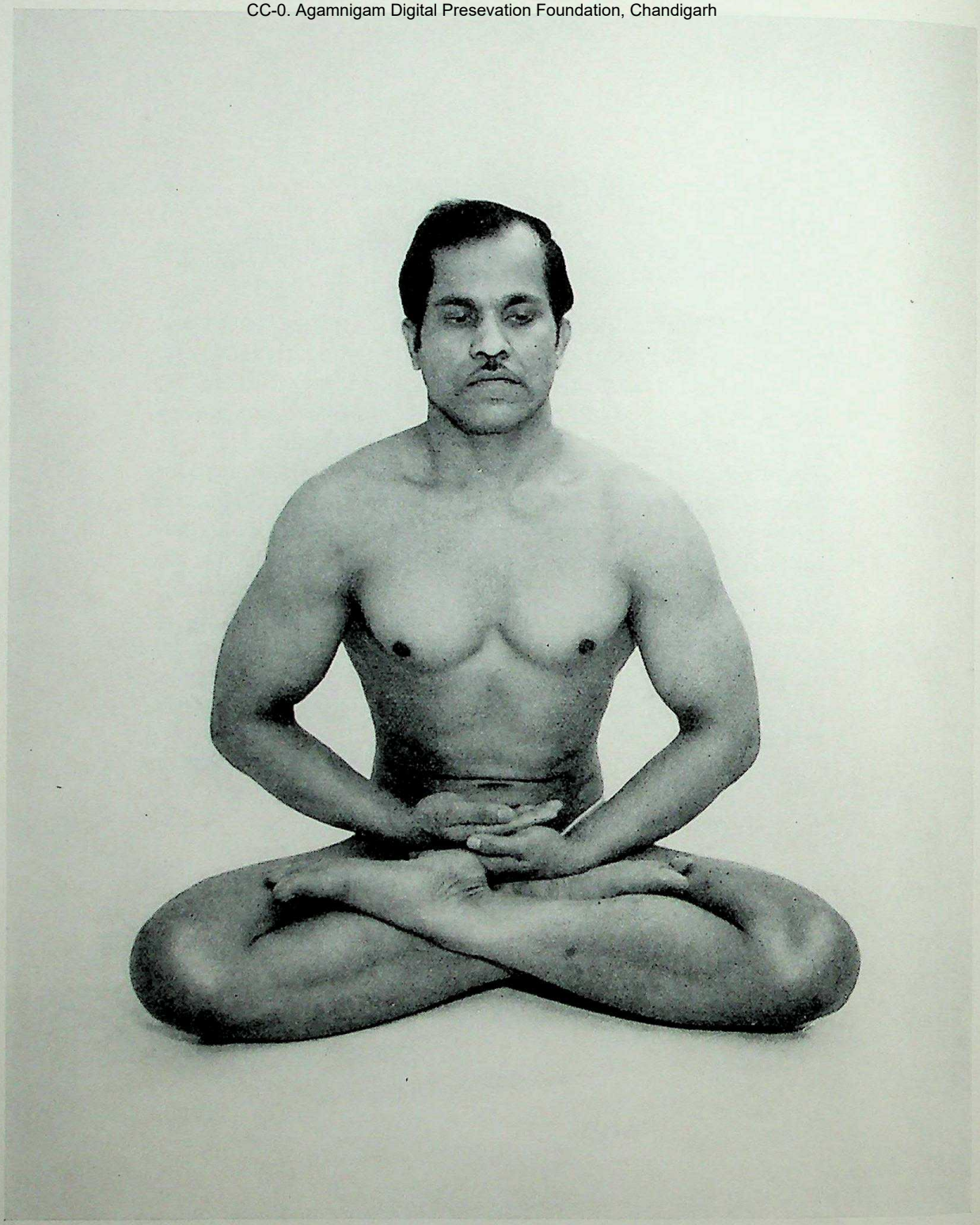
Acknowledgements

I WISH to thank Professor Elis Berven, Stockholm, for his kindness to write a Foreword to this book.

The exercises are illustrated by photographs of my Indian and Swedish pupils. Figs. 1, 5, 6, 7, 9, 15, 16, 17, 19, 21, 22, 26, 30, 31, 32, 33, 34, 35, 37, 42A, 43, 44, 45, 46, 47, 49, 50, 53, 57, 59, 60, 61, 62, 70, 73, 74, 75, 76, 78, 79, 80, 84, 85, 86, 94, 95, 101, 102 and 103 are illustrated by photographs of Dinabandhu Pramanick; Fig. 4 by Kamalaksha Goswami (Calcutta); Figs. 8, 14, 29A and 100 by Brajendra Sundar Goswami (Calcutta); Figs. 10, 12, 23, 67, 69, 87, 91, 104 and 106 by Renu Ghosh (Calcutta); Figs. 29 and 108 by Leela Ghosh (Calcutta); Figs. 24, 25, 27, 28, 36, 38, 39, 40, 42, 48, 55, 56, 58, 81, 82, 83, 88, 105 and 107 by Pārvatī Devī (Karin Schalander, Stockholm); Fig. 11 by Kerstin Aldin (Stockholm); Figs. 2, 3, 13, 18, 20, 41, 52, 54, 68, 89, 90, 93 and 100B by Olle Söderblom (Stockholm); Figs. 71, 72, 77, 96, 97, 98, 99 and 100A by Hans Fredlund (Stockholm); Figs. 21A, 51, 63, 64, 65, 66 and 92 by Arne Lundgren (Stockholm). I wish to thank them all.

SHYAM SUNDAR GOSWAMI.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



Śiva.
Posed by Dinabandhu Pramanick.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

To
the Lord
Śiva

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Contents

Page

Acknowledgements 5

Preface 15

Foreword 17

Introduction 19

Part I

YOGA EXERCISE AND ASSOCIATED FACTORS

Chapter I. The Evolution of Yoga Exercise 25

Muscle Movements Stage by Stage—Fish Stage—Amphibian Stage—Reptilian Stage—Mammalian Stage—Human Stage—The Birth of Yoga—Physical Education Activity Tables—Concentration Stage by Stage—Concentration Exercises—Motionless Attitude of the Body—Breath-control in Concentration—Yama and Niyama—The Rôle of Haṭha-yoga—Yoga Exercise—Breath-control Stage by Stage—Control Exercise—Cāraṇā (Contraction System)—Āsana (Posture Exercise).

Chapter II. Fundamentals of Yoga Exercise 50

Static-dynamic Aspects of Man—Exercise Defined—The Pattern of Body aimed at in Yoga—Fundamental Posture in Yoga—Static Posture Exercise—Dynamic Posture Exercise—Types of Muscular Movements—Posture Movements of Yoga.

Chapter III. Developmental Aspects of Yoga Exercise 59

Muscular Growth—Fatty Accumulation—A High Standard of Muscular Growth—Muscular Development—Size and Power of Muscle—Muscular Power—Specialization in Physical Development—Health-level of Physical Development.

Chapter IV. Health and Yoga Exercise . 69

Vital Endurance—Patterns of Thoughts and Actions—Rôle of Muscular Exercise—Blood Purification.

Chapter V. Practical Application of Yoga Exercise 71

Time for Exercise—Occupation and Exercise—Condition of Health and Exercise—When Exercise is Contraindicated—Exercise and Age—Exercise for Females—Exercise during Menstruation—Baths—Mental Factor—Relaxation.

Chapter VI. Dynamic Application of Posture Exercise 74

Graduated Contraction Method—Posture-contraction—Repetition Factor—Dynamic Posterior Trunk-bend Posture Exercise—Dynamic Anterior Trunk-bend Posture Exercise—Dynamic Lateral Trunk-bend Posture Exercise—Dynamic Trunk-twist Posture Exercise—Dynamic Neck Posture Exercise—Dynamic Anterior Trunk-raise Posture Exercise—Dynamic Oblique Trunk-raise Posture Exercise—Dynamic Lateral Trunk-raise Posture Exercise—Dynamic Pelvis-raise Posture Exercise—Dynamic Leg-raise Posture Exercise—Dynamic Anterior Trunk-leg-raise Posture Exercise—Dynamic Lateral Trunk-leg-raise Posture Exercise—Abdomino-retraction Act (Uḍḍīyāna)—Straight-muscle Act (Naulī)—Dynamic Pelvic Posture Exercise—Anal Act—Dynamic Pectoral Limb Posture Exercise—Dynamic Pelvic Limb Posture Exercise.

Chapter VII. Static Application of Posture Exercise 80

Maintaining-time—Endurance and Will-power Phases—Practical Application: Static Posterior Trunk-bend Posture Exercise—Static Anterior Trunk-bend Posture Exercise—Static Lateral Trunk-bend Posture Exercise—Static Trunk-twist Posture Exercise—Supplementary Static Spinal Posture Exercise—Static Neck Posture Exercise—Supplementary Static Neck Posture Exercise—Static Anterior Trunk-raise Posture Exercise—Static Pelvis-raise Posture Exercise—Static Anterior Trunk-leg-raise Posture Exercise—Static Lateral Trunk-leg-raise Posture Exercise—Supplementary Static Abdominal Posture Exercise—Static Pelvic Posture Exercise—Supplementary Static Pelvic Posture Exercise—Static Pelvic Control Exercise—Static Pectoral Limb Posture Exercise—Static Pelvic Limb Posture Exercise—Static Balance Posture Exercise—Static Inverse Body Posture Exercise—Folded-legged Postures.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Chapter VIII. Diet 85

Yogic Diet—Classification of Foods—Acid Fruit Group—Sweet Fruit Group—Non-starchy Vegetable Group—Starchy Vegetable Group—Cereal Group—Pulse Group—Nut Group—Milk Group—Fat Group—Sugar Group—Balanced Diet—Right Eating Habits—Suggested Menus.

Chapter IX. Fasting and Special Diets . 93

Fasting Defined—Conducting a Fast—Fast-breaking—Milk Diet—Milk-fruit Diet—Fruit Diet—Raw Diet—Orange Juice Diet.

Chapter X. The Yoga Method of Internal Cleansing 96

Oral Cleansing—Oesophageal Cleansing—Gastric Cleansing—Colonic Cleansing—Colonic Auto-lavage—Demonstration of Colonic Auto-lavage under X-rays—Enema—Colonic Auto-air Bath—Alimentary Canal Auto-lavage—Easy Method of Alimentary Canal Cleansing—Alimentary Canal Auto-air Bath—Pharyngonasal Water Baths — Nasal Thread-cleansing.

Chapter XI. The Yoga Method of Endocrine Development 102

Gland Transplantation and Vasoligature—Yoga Method—Blood Purification—Endocrine Exercise—The Exercise Plan for Endocrine Development.

Chapter XII. Gonadal Efficiency and Control 104

Interstitial Cells and Seminiferous Tubules—Control of Ejaculation—Yoga Method of Control—Gonadal Control Process (Vajrolī)—An Experiment.

Part II

TECHNICAL ASPECTS OF YOGA EXERCISE

Chapter XIII. Spinal Posture Exercise . 109

Starting Positions—Spinal Posture Exercise Defined and Classified—Posterior Trunk-bend Posture Exercise—Anterior Trunk-bend Posture Exercise—Lateral Trunk-bend Posture Exercise—Trunk-twist Posture Exercise—Supplementary Spinal Posture Exercise.

Chapter XIV. Neck Posture Exercise . 131

Supplementary Neck Posture Exercise.

Chapter XV. Abdominal Posture Exercise . 134

Abdominal Exercise Classified—Anterior Trunk-raise Posture Exercise—Oblique Trunk-raise Posture Exercise — Lateral Trunk-raise Posture Exercise—Pelvis-raise Posture Exercise—Leg-raise Posture Exercise—Anterior Trunk-leg-raise Posture Exercise—Lateral Trunk-leg-raise Posture Exercise—Supplementary Abdominal Posture Exercise—Abdomino-control Exercise.

Chapter XVI. Pelvic Posture Exercise . 153

Supplementary Pelvic Posture Exercise—Pelvic Control Exercise.

Chapter XVII. Pectoral Limb Posture Exercise 160

Chapter XVIII. Pelvic Limb Posture Exercise 166

Chapter XIX. Balance Posture Exercise . 171

Supplementary Balance Posture Exercise.

Chapter XX. Inverse Body Posture Exercise 181

Supplementary Inverse Body Posture Exercise.

Chapter XXI. Folded-legged Postures . 186

Chapter XXII. Breath-control Exercise (Prāṇāyāma) 189

Classification of Breath-control Exercise—Long-slow Breath-control Exercise—An Experiment on Sahita Breath-control—Short-quick Breath-control Exercise.

Chapter XXIII. Concentration Exercise . 193

Physical Preparation for Concentration Exercise—A Method of Developing Concentration Power.

Part III

EXERCISE PLAN

Chapter XXIV. General Exercise Plan . 201

Light Form of Exercise—Medium Form of Exercise—Heavy Form of Exercise.

Chapter XXV. Specific Exercise Plan and Daily Schedule 204

Dynamic Spinal Posture Exercise Plans—Dynamic Neck Posture Exercise Plans—Dynamic Abdominal Posture Exercise Plans—Dynamic Pelvic Posture Exercise Plans—Dynamic Pectoral Limb Posture Exercise Plans—Dynamic Pelvic Limb Posture Exercise Plans—Daily Schedule.

Chapter XXVI. Static Exercise Plan and Daily Schedule 209

Light Form of Exercise—Medium Form of Exercise—Heavy Form of Exercise—Daily Schedule.

Yoga Demonstrations 214

Note on the Pronunciation of Transliterated Sanskrit Words 215

Bibliography 216

Glossary 218

Index 219

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

List of Illustrations

	Page
The Author	*Frontispiece*
Śiva. *Posed by Dinabandhu Pramanick*	6
A. Beauty and power in relaxation. *Posed by Dinabandhu Pramanick*	58
B. An imitation of the Lord Kṛiṣṇa holding the Govardhana rock. A most symmetrically developed body. *Posed by Dinabandhu Pramanick*	60
C. An imitation of Mahāvīra carrying the Gandhamādana rock. *Posed by Dinabandhu Pramanick*	61
D. Kṛiṣṇa with his divine flute. Beauty in form and grace in motion. *Posed by Pārvatī Devī* (Karin Schalander)	63
E. Feminine beauty in a Yoga posture. *Posed by Renu Ghosh*	65
F. Flexibility and grace in a symmetrically developed body. *Posed by Leela Ghosh*	66
G. Radiograph I. Taken in the Karolinska Sjukhuset (Hospital), Stockholm. After the suction of fluid into the colon through the process of Colonic Autolavage (Vasti) without instrumental aid. Performed by Dinabandhu Pramanick at the Karolinska Sjukhuset, Stockholm, on August 8th, 1949	99
H. Radiograph II. Taken in the Karolinska Sjukhuset, Stockholm. Showing the contrast medium brought up into the right half of the transverse colon by muscular control by Dinabandhu Pramanick at the Karolinska Sjukhuset, Stockholm, on August 8th, 1949	99

Fig.	
1. Serpent Posture (Bhujaṅgāsana)	110
2. Snake Posture (Sarpāsana)	111
3. Back-raise Posture with forearms locked behind head (Makarāsana)	112
4. Locust Posture (Śalabhāsana)	112
5. Bow Posture (Dhanurāsana)	113
6. Boat Posture (Naukāsana)	114
7. Swing Posture (Dolāsana)	114
8. Serpent-king Posture (Bhujaṅgendrāsana)	115
9. Cuckoo Posture (Cātakāsana)	115
10. Raised Bow Posture (Ūrdhva Dhanurāsana)	116
11. Bent-head Adamantine Posture (Nataśira Vajrāsana)	116
12. Modified Wheel Posture (Ardha Cakrāsana)	117
13. Back Posture (Pṛiṣṭhāsana)	117
14. Wheel Posture (Cakrāsana)	118
15. Back-stretch Posture (Paścimatānāsana)	119
16. Head-knee Posture (Jānuśirāsana)	119
17. Forward Head-bend Posture (Bhūnamanāsana)	120
18. Head-bend Posture (Nataśirāsana)	120
19. Head-bend Lotus Posture (Yoga-mudrā)	121
20. Forward Body-bend Posture (Praṇatāsana)	121
21. Foot-hand Posture (Pāda-hastāsana)	122
21A. Foot-hand Posture, Last Stage (Pāda-hastāsana)	122
22. Semilunar Posture (Ardha Candrāsana)	123
23. Hip-bend Posture (Nitambāsana)	123
24. Moon Posture (Candrāsana)	124
25. Twist Posture (Vakrāsana)	125
26. Modified Spine-twist Posture (Ardha Matsyendrāsana)	126
27. Ankle-hold Modified Spine-twist Posture, Front View (Baddha Ardha Matsyendrāsana)	127

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Fig.		Page
28.	Ankle-hold Modified Spine-twist Posture, Back View (Baddha Ardha Matsyendrāsana)	128
29.	Spine-twist Posture (Matsyendrāsana)	128
29A.	Ankle-hold Spine-twist Posture, Back View (Baddha Matsyendrāsana)	129
30.	Sideward Head-bend Posture (Pārśva Bhūnamanāsana)	129
31.	Fish Posture (Matsyāsana)	130
32.	Neck Posture (Grīvāsana)	132
33.	Neck-bridge Posture (Kaṃdharāsana)	133
34.	Spine Posture (Merudaṇḍāsana)	135
35.	Spine Posture with hands clasped behind head (Śirahasta Merudaṇḍāsana)	136
36.	Spine Posture with forearms locked behind head (Śirabāhu Merudaṇḍāsana)	136
37.	Risen Balance Posture (Utthita Tolāṅgulāsana)	137
38.	Oblique Spine Posture (Pārśvavakra Merudaṇḍāsana)	137
39.	Oblique Spine Posture with hands clasped behind head (Pārśvavakra Śirahasta Merudaṇḍāsana)	138
40.	Oblique Spine Posture with forearms locked behind head (Pārśvavakra Śirabāhu Merudaṇḍāsana)	138
41.	Lateral Spine Posture (Utthitapārśva Merudaṇḍāsana)	139
42.	Plough Posture (Halāsana)	140
42A.	Plough Posture with forearms locked behind head (Śirabāhu Halāsana)	140
43.	Ear-pressing Posture (Karṇapīḍanāsana)	141
44.	Risen Back Posture (Utthita Pṛiṣṭhāsana)	142
45.	Bent-knee Back Posture (Natajānu Pṛiṣṭhāsana)	142
46.	Risen Leg Posture (Utthita Dvipādāsana)	143
47.	Sideward Leg-motion Posture (Pārśva Pāda-cālanāsana)	144
48.	Bent-leg Posture (Natapādāsana)	145
49.	Head-knee Spine Posture (Jānuśira Merudaṇḍāsana)	146
50.	Knee-touching Spine Posture (Bhālaspṛiṣṭajānu Merudaṇḍāsana)	146
51.	Pillow Posture (Upādhānāsana)	147
52.	Toe-hold Lateral Spine Posture (Baddhāṅguli Pārśva Merudaṇḍāsana)	148
53.	Risen Right-angle Posture (Utthita Samakoṇāsana)	149
54.	Bent-knee Inverse Lotus Posture (Natajānu Ūrdhva Padmāsana)	149
55.	Abdomino-retraction Act (Uḍḍīyāna)	150
56.	Straight-muscle Act, Central Isolation (Naulī)	150
57.	Straight-muscle Act, Uni-lateral Isolation, making both Recti stand in the Right Side (Naulī)	151
58.	Straight-muscle Act, Uni-lateral Isolation, making Left Rectus stand in the Left Side (Naulī)	152
59.	Pelvis-raise Posture (Kaṭikāsana)	153
60.	Arm-head Posture (Bhuja Śirāsana)	154
61.	Single Foot-head Posture (Ekapāda Śirāsana)	154
62.	Double Foot-head Posture (Dvipāda Śirāsana)	155
63.	Single Foot-head Head-knee Posture (Ekapāda-śira Jānuśirāsana)	155
64.	One-leg Pillar Posture (Ekapāda Stambhāsana)	156
65.	Pillar Posture (Stambhāsana)	156
66.	Noose Posture (Pāśinī-mudrā)	157
67.	Happy Posture (Bhadrāsana)	157
68.	Sideward Leg-stretch Posture (Pādaprasāraṇāsana)	158
69.	Backward-forward Leg-stretch Posture (Hanumadāsana)	159
70.	Risen Lotus Posture (Utthita Padmāsana)	160
71.	Cock Posture (Kukkuṭāsana)	161
72.	One-arm Cock Posture (Ekahasta Kukkuṭāsana)	161
73.	Quadruped Posture (Catuṣpādāsana)	162
74.	Three-footed Posture (Tripadāsana)	163
75.	Arm-leg Posture (Bāhu-pādāsana)	163
76.	Opposite Arm-leg Posture (Viparīta Bāhu-pādāsana)	164
77.	Arm Posture (Praganḍāsana)	164

CC-0. Panini Kanya Maha Vidyalaya Collection. An eGangotri Digital Preservation Foundation, Chandigarh

Fig.		Page
78.	Arm Motion (Bāhu-cāraṇā)	165
79.	Thigh Posture (Ūrvāsana)	166
80.	Knee-touching Thigh Posture (Jānuspṛiṣṭa Ūrvāsana)	167
81.	Feet-extending Thigh Posture (Pādaprasāraṇa Ūrvāsana)	167
82.	Sideward Feet-extending Thigh Posture (Pārśva Pādaprasāraṇa Ūrvāsana)	168
83.	Leg-raise Thigh Posture (Pādotthita Ūrvāsana)	169
84.	One-legged Squat Posture (Pādāṅguṣṭhāsana)	169
85.	Toe Posture (Aṅguṣṭhāsana)	170
86.	One-legged Toe Posture (Ekapāda Aṅguṣṭhāsana)	170
87.	Eagle Posture (Garuḍāsana)	171
88.	Standing Head-knee Posture (Uttha Jānuśirāsana)	172
89.	Wing Posture (Pakṣāsana)	172
90.	Bent-head Wing Posture (Nataśira Pakṣāsana)	173
91.	Knee-heel Posture (Vātāyanāsana)	173
92.	Standing Single Foot-head Posture (Uttha Ekapāda Śirāsana)	174
93.	Standing Leg-stretch Posture (Uttha Pādaprasāraṇāsana)	175
94.	Mountain Posture (Parvatāsana)	175
95.	Peacock Posture (Mayūrāsana)	176
96.	Crab Posture (Karkaṭāsana)	176
97.	Rolling Posture (Lolāsana)	176
98.	One-arm Rolling Posture (Ekahasta Lolāsana)	177
99.	Arm-stand Posture (Hasta Vṛikṣāsana)	178
100.	Scorpion Posture (Vṛiścikāsana)	178
100A.	Single Arm-stand Posture (Ekahasta Vṛikṣāsana)	179
100B.	Head-stand Posture (Śirāsana)	179
101.	Inverse Act (Viparīta-karaṇī-mudrā)	182
102.	Shoulder Posture (Sarvāṅgāsana)	183
103.	Head Posture (Śīrṣāsana)	184
104.	Inverse Lotus Posture (Ūrdhva Padmāsana)	184
105.	Accomplished Posture (Siddhāsana)	186
106.	Lotus Posture (Padmāsana)	187
107.	Pleasant Posture (Sukhāsana)	187
108.	Toe-hold Lotus Posture (Baddha Padmāsana)	188

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Preface

DURING my visit a few years ago to London, Paris, Zürich and other places in Europe, where I gave lectures on Yoga and demonstrations, I encountered an interest which was considerably greater than before the war, and I was repeatedly asked to give practical instructions in Yoga. Even medical men showed great interest and I had the opportunity to demonstrate before well-known surgeons and physicians the more advanced muscle control, which is a part of Haṭha-yoga. Haṭha-yoga is not merely a means of acquiring a sound, strong and vital body, but also a reliable method of acquiring happiness and harmony and above all of developing that inner strength, which enables man to bear sorrow, pain and failures with equanimity.

It has been my firm conviction that there exists a serious demand for a methodical and practical exposition of the Haṭha-yoga system, with a view to acquire physical strength and mental harmony, and I have been asked to meet with this demand by people very much interested in this matter, by friends and pupils, and have finally decided to write a book, based upon personal experiences and fundamental studies.

This book is mainly based upon original works on Yoga in Sanskrit, of which the majority is only available in the form of unpublished manuscripts, but also upon such instructions as have been conveyed from teacher to pupil throughout generations for thousands of years. Through personal experience I have been able to ascertain upon myself the practical value of Haṭha-yoga.

From my very childhood I was physically undeveloped, weak and susceptible to disease. Neither medicines nor ordinary dietetic measures helped. Physical exercises improved my physical condition to some extent but did not increase my power of resistance. I searched everywhere for a possibility to improve my poor health and came thus in contact with a remarkable man, named Kali Singha, who at that time was about 110 years old. He was the first who drew my attention to Haṭha-yoga, as a reliable means to give me what I needed. Singha was so much more dependable as he himself had practised Haṭha-yoga under the tuition of a guru, and for some time I became his pupil. This was at my age of seventeen. About this time K. Rammurti caused a great sensation in India by his demonstrations of supporting an elephant upon his chest. He claimed that his strength was due to Yoga exercises and especially to certain breathing exercises. My interest was greatly stimulated, and I decided to dedicate my time exclusively to the study of Yoga. As Kali Singha had died, I looked for a new teacher, and found him in my guru, the great Yogin Balaka Bharati, who initiated me in Haṭha-yoga and taught me the fundamentals of this unique system. My continuous exercises led to a quick and very satisfactory physical improvement. My muscles increased in size and strength, and finally I could control their movements completely. When a muscle was contracted, it was so hard that no impression could be made on it even with a pair of iron tongs. The muscles of the throat could be contracted to such an extent that throttling with an iron chain pulled by twelve men had no effect. I became more and more hardened against heat and cold, and most important of all I had developed a power of resistance which spared me every kind of illness. I had become a healthy man. I realized that a weakened body was an obstacle for the efficient expression and working of the mental powers and that a clean and healthy body was an important condition for clear thinking and concentration. Only one who is harmonious and well balanced in body and mind can develop his spiritual powers to a maximum degree.

In India, where Yoga is considered to be a method for the spiritual progress of humanity, by

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

means of the right control of the body and mind, many institutions of more or less permanent character have sprung up. The pupils in these schools receive theoretical and practical instructions, adopt a new mode of life and follow certain physical and moral rules. Their exercises become more and more difficult and, finally, they reach the highest stage of contemplation. In this way Yoga has been imparted during thousands of years, and thus it has been possible to make continuous observations upon human objects and to ascertain the effects of the methods, collecting experiences, which, according to my opinion, must be considered to be much more reliable than any of the modern systems, which are based upon experiences and observations during a very short period of time. Personally, I have in my school in Calcutta, for thirty-five years and with good results, applied the Yoga method upon a great number of pupils of both sexes, different ages and different conditions of health.

Some people think that Yoga exercises are not suitable for the Western people. This has been contradicted by my own experience, which shows how Western pupils have been able to master the Yogic exercises equally as well and to derive the same benefit as my Eastern pupils. Some of them have reached a very high standard, as can be seen from many of the exercises in this book which have been illustrated by my Swedish pupils. The secret of success lies in determination, perseverance and proper guidance.

Another question has been raised. That is that Yoga practice should be very time-consuming. This time factor may be considered from two points of view: the time devoted in each day or week to the exercise and the time required to get results. For ordinary busy people 3 to 5 hours a week are sufficient, and most of them will be able to devote this time for their physical health and mental revitalization. But those who want to reach perfection have to devote much more time. It is not only true with Yoga, but also with athletics, sports, gymnastics and, in fact, everything. We are not always conscious of how much time we waste every day on useless social pleasures and many other things. If we learn to economize time, it will not be difficult for us to spend the necessary time for rebuilding ourselves.

I would like to stress still another point—namely, that if the Yoga method seems to stand in contradiction to generally accepted views, it should not be discarded at once, for that reason, as being unscientific, useless or even harmful. One should try to keep in mind that these methods, however strange and peculiar they may appear to the Western mind, have stood the test of time. Instead of throwing them aside as worthless, one should study them and repeat one's experiments, in order to become convinced in the end.

The photographs in this book show exercises executed by my Indian and Swedish pupils.

Lastly, I suggest that the reader first may try to assimilate the ideas by reading the book carefully and thinking it over. He may find here some difficulty because of certain ideas and interpretations which may not be familiar to the way of thinking of many Western people. I have tried my best to make the book as clear and palatable as possible, but still many readers may think that it is a highly specialized work. I know definitely that it is useless to deal with the subject more superficially simply to make it acceptable to the reader. Shallow knowledge will not help here. The reader must be ready to welcome new thoughts, because this is the only way of self-expansion. After the clear understanding of these ideas he will try to translate his knowledge into action by practising the exercises and following other instructions contained in the book.

I sincerely believe that, with a normalized and controlled body and a vitalized and concentrated mind attained through the practice of Yoga, life will appear more beauteous and charming, more lovable and enjoyable. Life will be worth living.

SHYAM SUNDAR GOSWAMI.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Foreword

YOGA is a most ancient system of education, based on a higher philosophical knowledge and a spiritual conception of man, for the harmonious development of the body and mind. It recognizes the necessity of developing a healthy, vital and well-controlled body for the attainment of a high order of mental life.

From his lifelong study and experience, Goswami has written a book on Haṭha-yoga in which he has been able to expound Yoga in a remarkable manner. Various forms of exercises have been presented in a systematic way. The book teaches how one can develop the power of concentration, control one's mind and build a healthy, strong and beautiful body.

I hope the book will be very helpful for Western people and others who are interested in Yoga and desire to attain physical, mental and spiritual development.

ELIS BERVEN.

STOCKHOLM.
June 17th, 1954.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Introduction

In Yoga a motionless, changeless, eternal principle has been recognized. From Yogic point of view the recognition as an intellectual verbosity, philosophical speculations or a psychological curiosity is not so important. It is entirely based on spiritual realization of this principle and experienced as the ultimate reality. This realization is only possible when the subject-object experiences become transformed into a homogeneous pattern. The process involved in it is technically known as Samādhi (super-concentration).

Consciousness at the human level is split into subjective and objective forms upon which rest the world experiences. By careful analysis we find that the subjective aspect of consciousness is composed of two component parts: I+my=I-my feeling. The main part is the "I" without "my". This means pure I without any trace of relation to objective consciousness. But at the common level it is almost impossible to isolate "I" from "my" and objects.

The subject projects itself apparently beyond its boundaries up to its objects. The projections are not in the nature of indifference, but are fully saturated with desires, and the whole experience gives one of the three kinds of reaction: the experience of pleasure, of pain, or a temporary inertia combined with bewilderment when there is excessive pleasure or pain. And everything together is the world experience.

Desires arise in the subject and link it with objects. At the back of the desire is interest. The subject feels interested in those objects which will give it enjoyment. How does the subject know that certain objects will give it enjoyment? The answer may be that the subject has former experience. But how did the first experience come? The reply is usually given by stating the whole phenomenon as "without beginning". An example of seed-tree is often cited in this connection. This interpretation is inadequate.

The first interest for objects is not due to any previous experience of the subject, but it has been embedded in the subject and therefore it has no beginning. It is beyond cause-effect. Both the subject and the objects are born at the same moment, and before any experience of the enjoyment due to the contact with the object, the subject has clear interest for objects. This interest is, so to speak, a memory of some blissful experience which the subject had before it was born. This means that consciousness beyond the subject-object phenomenon is in its own real form, which is bliss. This is Supreme Consciousness, which is being-consciousness-bliss. Without the recognition of Supreme Consciousness as the ultimate reality, the static background of all motional phenomena, the behaviour of the subject cannot be rationally explained.

The cosmic phenomenon is the manifested Will of the unlimited, the indestructive quiescent Supreme Consciousness—a will having the creative potency capable of being expressed fully. This is why the Will is called Śakti. Śakti is the massive concentrated energy which is in the nature of consciousness and associated with bliss and at the same time capable of being expressed as what is creation. A dichotomy in the consciousness appears due to the influence of Māyā, an aspect of Śakti in her creative mood.

An object at the gross level is a compound of five mahābhūtas which is matter. When the mahābhūtas are isolated from the compound they are five forms of non-material subtle energy ultimately derived from still subtler and most concentrated forms of non-material energy called tanmātras. Objects being dematerialized by the sensory processes are represented in the consciousness as heterogeneous images revolving around the "I". The constant mouldings of the objective aspect of consciousness into images which are of the sensory pattern is called vṛittis. It is the distracted

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

state of the mind. When it is transformed into the single-intent state by the processes of dhāraṇā (elementary concentration), dhyāna (unbroken concentration) and samādhi (super-concentration), a brighter form of mental life is evolved and gradually the mind is transformed into an extraordinary state in which the complete elimination of vṛittis occurs. It is a state which is beyond the knowledge of the Known, a state of realization of the Unknown, a state of realization which is beyond realization. It is the state of Asamprajñāta Samādhi.

According to Haṭha-yoga, not only the mental but prāṇic and physical factors are involved in concentration and for the development of concentration a harmonious functioning of man at the three levels—mental, prāṇic and physical—is the sine qua non.

It is not a wiser plan to live mostly in one aspect of life, ignoring the rest. A brilliant expression of mind, even living in a sickly and devitalized body, may appear very impressive, or a superbly developed body with a meagre mental life may be quite charming. This mode of living a life may go on to a certain limit, but ultimately it goes wrong and breaks down. It is a failure of understanding the correct level in which the mind and body should be properly balanced. To find out the correct horizontal line is the starting point of Haṭha-yoga. Haṭha-yoga points out that neither the body nor the mind is the horizontal line, but prāṇa on which the body and the mind can be properly balanced. But in our everyday life the prāṇic line is not straight as it should be, and this is why there is so much disharmony. When the prāṇic line is made straight, the problem is solved.

Prāṇa is the kinetic principle—the movement potential—which, when operating at the mahābhūtas level, expresses what is known as the phenomenon of life. All the movements of the living body, from the cell movements to all organic movements including muscular movements, are due to the prāṇic operation in the body. The functioning of the body as well as of the mind is entirely dependent on prāṇa.

All the movements, from the minutest to the grossest, which are going on in the body are the expression of extra-physical subtler prāṇic movements. Haṭha-yoga aims at gaining full control over the gross movements with a view to transform the centrifugal forces operating in them into centripetal force and in the process of transformation the mind, step by step, is released from the physical influence and its distraction changes into single-intentness. The control process starts with the musculo-diaphragmatic movements, because it is easier to approach the other movements through them.

Prāṇa at the physical level becomes the energy-acquiring and energy-consuming principles of the body. At the mental level, prāṇa becomes activating and inhibitory subtle forces and causes distraction and infatuation as well as temporary calmness of the mind. Unless these forces and principles are harmonized an imbalance is established in the organism, making the body devitalized, weak and short-lived, and the mind restless, dull and dark. The process of harmonization is termed Nāḍī-śuddhi. It consists of two parts: gross and subtle. The gross process includes six purificatory acts, posture exercise, special posture and control exercise and contraction exercise by the right application of which the body is purified and vitalized and becomes fit for the practice of subtle process. The subtle process is a special form of breath-control exercise by which nāḍī-śuddhi is attained. After this a student may go deeper into breath-control as advocated in Haṭha-yoga or can adopt Mantra-yoga or Laya-yoga for developing concentration.

By the practice of breath-control (prāṇāyāma) various extraordinary powers are attained. The writer had an opportunity to witness the phenomenal physical strength exhibited by his Haṭha-yoga guru (teacher), Balaka Bharati. One day the Yogin broke a very large trunk of a living tree in an attempt to pull it out after this had unsuccessfully been tried by a team of six strong men. He had other super-powers. One day I picked up a very hot copper pot without knowing it was hot. It was so hot that it immediately slipped from my hand, and I was feeling intense pain and feared blistering. The Yogin was there, and as soon as he saw this, he immediately came near me and put his hand on my burnt palm. To my utter surprise, the pain at once disappeared and there was no blister formation. He used to make oblation while holding on his bare palm of the left hand a very hot earthen pot, in which charcoal was burning, for more than half an hour without any burns or pain. The writer knows that oblation-

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

fire can be made by mantra, without using light or matches. The Yogin can walk barefooted on fire. The writer's pupil, Dinabandhu Pramanick, demonstrated the fire-walking.

At the highest stage of breath-control the human body rises upwards above the ground and floats in the air. A Yogin named Sisala of Madras kept himself suspended in the air, assuming the lotus posture, without any support except for resting his right hand lightly on a rolled deer hide, projecting horizontally from a vertically placed brass rod, fixed on a wooden stool. The Yogin used to stay in this position for a long time with his eyes closed.

Another levitation act was shown by a Yogin named Suhbayah Pallavar of Tinnevelly. He remained suspended horizontally in the air for about four minutes, without any support except for resting his hand lightly on top of a cloth-covered stick. Then the Yogin began to descend from the top to the bottom of the stick, and within five minutes he had covered a distance of about three feet, still remaining in the horizontal position. The Yogin was under trance and in a state of rigor mortis. He was so stiff that four or five men could not bend his limbs. After the act was over, he was massaged and subjected to cold pouring bath. Then he returned to his normal state. This is, of course, not an advanced form of levitation.

Breath-control develops such extraordinary control over the vital organs that their normal functions may be altered and even suspended. The stopping of the heart and pulse and the suspension of breathing for a long period have been demonstrated. A condition of latent life which is an impossible form of existence for man at a common level has also been demonstrated.

In 1837, the great Haṭha-yoga master, Haridāsa, gave a demonstration of how after having allowed himself to be buried he could remain underground for forty days before the Maharaja Ranjit Sing, the ruler of the Punjab, his court and a number of English and French gentlemen, among whom were medical men. General Ventura of Paris and Colonel Sir C. M. Wade, the Political Agent of the British Government, were also present. The Yogin assumed the Lotus Posture, with his nostrils and the external acoustic meatus blocked by wax. He also closed the rima glottidis by retroverting his tongue. This means he adopted the Khecarī process. He was then wrapped in linen and placed in a wooden box on which a strong lock was put by the Maharaja and the Maharaja's seal was put on several parts of the box. The box was then buried. Barley was sown on the ground, the space was enclosed with a wall and it was guarded by sentinels. On the fortieth day, the box was brought up and opened and the Yogin was found in the same sitting posture he had assumed at the commencement. The body of the Yogin was examined by Dr. McGregor, Residency Surgeon, and Dr. Murray. There was no pulsation at the wrist, no signs of animation. Then he was resuscitated by his pupils. Another thing to be noted was that he had been shaven on the day of his burial, but at his exhumation it was found that no hair had grown at all on his cheeks.

Vital endurance is greatly increased by the practice of Yoga. In Benares, Bhaskarananda Sarasvati kept his bare body exposed day and night to the intense heat of summer and cold of winter. The Yogins also attain great age. The great Yogin Tailanga Swami lived 280 years. Lokanatha Brahmachari lived 166 years.

Apart from the attainment of spiritual development and super-powers, Haṭha-yoga is an advanced method of physical education. Through the right application of its various processes and exercises we can attain a body which is vital, healthy, clean, strong, enduring, well controlled and symmetrically developed, and a mind imaginative, determinative, forceful, chaste, calm and happy. We can raise human efficiency to a higher level by the practice of Yoga. Yoga is for saints and spiritual pupils. It is also for worldly men and women. Yoga should be applied in everyday life and in every phase of life to hasten human advancement, towards health, happiness, harmony and peace.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Part I

YOGA EXERCISE AND ASSOCIATED FACTORS

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter I

The Evolution of Yoga Exercise

MUSCLE, in motion as well as repose, has played a most important rôle in man—a focus of forces operating through an organism, the structural and functional complexity of which is the most perplexing in nature—in his gradual unfoldment through which the marvellous possibilities and probabilities lying within him have begun to be actual. But muscle had a very long history before it reached the human level. However, its functioning which is expressed as movement, at all levels and in all ages, is associated with the gross manifestation of the dynamic aspect of the life principle. Muscle began to play its specific rôle through motion as soon as its birth took place, its non-motion aspect being manifested fully at a higher stage of the mental life of man.

Education through muscle movement has been an intrinsic part of life of those organisms endowed with muscle. This education is intimately associated with the survival and progressive development of the organisms. In simpler forms of life all cells, it is believed, possessed more or less the power of movement. But increased complexity has been accompanied by the specialization of the cells. The property of movement has been finally transferred to a special group of cells called muscle. The muscle became the seat of specialized functions and, stage by stage, muscle cells gained more and more ability to do specialized motions. The specialization of muscle was associated with the development of the various special groups of cells forming various organs and, stage by stage, the complexity of the organisms increased more and more, which culminated in man.

Muscle Movements Stage by Stage

Muscle can roughly be divided into two main groups, according to the types of function. One group is concerned with locomotion and various purposeful and complex movements, and the other associated with digestion, circulation, excretion, reproduction, etc. The first group is called the striated muscle. The striated muscles have origins and insertions on skeletal structures and move them when contracted. The second group is called smooth muscle. The cardiac muscle forming the heart is a special type consisting of a continuous network of strands. However, it may be put under the second group. We also ignore here the bronchial muscles which are also striated but innervated by the visceral motor fibres. We are mainly concerned here with the striated muscles which have influenced profoundly the second group of muscles.

The development of the striated muscle occurred even at the invertebrate stage. But its distinct function began to be manifested with the development of the skeleton which provided it with the support necessary for its powerful movements. The main supporting structure in the shape of the vertebral column on which the striated muscles operated and produced motion developed at the vertebrate stage. Ignoring the earliest types in which the notochord served the purpose of such support, we can begin with those organisms which were provided with the real backbones.

Fish Stage

The earliest distinct type of muscle movement which we may call the swimming movement was exhibited by fishes in the Devonian Period, called the Age of Fishes (from 320 to 275 million years ago). The swimming movement consists of undulatory movements of the trunk effected through lateral spinal motion serving the purpose of progression. It was essentially the spinal movement executed by those striated muscles which were in

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

intimate relation to the spinal column. These are the trunk, or better spinal, musculature. The spinal musculature was remarkably developed in fishes.

The spinal musculature of fishes may be divided into dorsal spinal musculature (epaxial) and ventral spinal musculature (hypaxial).

The spinal musculature is the fundamental musculature which developed first in the history of muscle and therefore it is the oldest and also strongest and most enduring and capable of influencing the vital organs and the nervous system to a remarkable degree. The nerve centres controlling the spinal musculature are, therefore, the oldest and also most stable. Functionally these nerve centres are inseparable from the fundamental musculature. Movements executed by the fundamental musculature are called fundamental movements. These movements have shaped the pattern of motor habit which is intimately related to the organic and nervous developments as well as to the general well-being of the organisms.

Amphibian Stage

The next stage of muscular movement was the crawling movement acquired by the amphibians in the Carboniferous Period (from 275 to 220 million years ago). At this stage the fins of the fishes were transformed into land limbs. But the first limbs were small and weak and unsuitable for locomotion. Locomotion was mainly effected through the crawling movements with the help of some support from the limbs.

The crawling movement was also a spinal movement executed by the spinal musculature. The size, strength and importance of the fish musculature were retained in the amphibian musculature.

Reptilian Stage

The third stage of muscular movement consisting of raising the body off the ground and supporting it horizontally on four limbs, quadrupedal walking and running and also bipedal fast running (by the ruling reptiles) were acquired by the reptiles in the Permian Period (from 220 to 195 million years ago) and the whole of the Mesozoic Era, called the Age of Reptiles (from 195 to 70 million years ago). From this stage onward the spinal musculature was freed from the task of locomotion which was taken over by the limb muscles.

The change in locomotor function brought about the reduction in relative volume of the spinal musculature and relative increase in bulk of the limb muscles. The development of limbs is associated with that type of locomotion best suited on land. But the reduction in size of the spinal musculature and the transference of locomotion to the limb muscles did not decrease its importance. It now exhibited a new movement in addition to older lateral spinal movement, the dorsoventral spinal movement. The dorsal spinal musculature became complex and presented three divisions.

The ventral spinal musculature became sheet-like to be fit for its new function, the support of the trunk viscera. It now practically became the abdominal muscles. The central portion became the Rectus abdominis, and the lateral portion formed the Obliquus externus abdominis,Obliquus internus abdominis and Transversus abdominis. The dorsomedial portion became the Subvertebralis acting as an antagonist to the dorsal spinal musculature in dorsoventral spinal movements. From the Obliquus externus abdominis arose the Intercostales externi and Supracostalis and from the Obliquus internus abdominis came the Intercostales interni. The Subcostales arose from the Transversus abdominis. Thus we see that the ventral spinal musculature became essentially abdominal and thoracic muscles which were concerned in various trunk movements, respiration and the support of the thoracic and abdominal organs. All of them belonged to the fundamental musculature.

The development of limb muscles occurred, because of the necessity of taking over the task of locomotion. The limb muscles are secondary to the spinal musculature as they came next, and therefore they are accessory muscles. The limb muscles increased in size, efficiency and complexity stage by stage due to adequate exercise they had from body progression.

The most important dorsal muscles of the pectoral limb at this stage include the Latissimus dorsi, Deltoideus, Triceps, and various extensors of the forearm. The ventral muscles are the Pectoralis, Coracobrachialis, Biceps brachii and other flexors. In a similar way the development of various important muscles on the pelvic limb took place. Thus the foundation of the muscular system was made, after which the mammalian muscular system was patterned with proper modification.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Mammalian Stage

Most successful quadrupedal walking and running including very fast running were acquired by the mammals in the Tertiary Period (from 70 to 1 million years ago). At the higher stage (Primate level) various arboreal activities were acquired by the primates. These activities included climbing, grasping with hands and hanging and swinging with the arms. Other complicated and difficult arboreal activities requiring flexibility, strength and skill were also acquired. An imperfect upright sitting posture was assumed.

The muscular system in general became more complex and the arrangement of muscles was changed. Some of the older muscles were modified and also new muscles arose. The Rectus abdominis was reduced in length, because the sternum became elongated. Now the Rectus abdominis became a purely abdominal muscle. The full development of a group of striated muscles forming the diaphragm that separates the thorax from the abdomen took place. The diaphragm seems to arise from the Rectus abdominis. Now the original spinal musculature can be divided into three main groups: spinal muscles proper, abdominal muscles and thoracic muscles. All these are fundamental muscles. Therefore the spinal, abdominal and thoracic movements are the fundamental muscular activities. The locomotor activities and various other complicated movements were executed by the accessory muscles of the limbs.

Human Stage

The first great and new muscle movements were the assumption of the perfect erect posture and perfect bipedal walking and running, acquired by man at an early Pleistocene epoch that began about 1 million years ago. It was mainly through the actions of the spinal musculature, helped by the limb muscles, that this momentous change in the body posture—from the long-continued horizontal position of the trunk into the vertical position—occurred. This new posture freed the pectoral limbs from the work of progression and enabled them to execute most complex forms of movements which are related to the development of the psycho-neural aspect of man. The erect posture itself is intimately related to mental development.

But this new posture (biped) was associated with the problem of maintaining the abdominal viscera in positions necessary for their normal functioning, because they were now under the influence of gravity. The pelvic floor and the mesentery alone could not do it successfully. Here the abdominal muscles played the most important rôle. The various activities which the Palaeolithic man had to undergo in his everyday life made his abdominal muscles strong.

The locomotor movements of the early man mainly consisted of walking, running and jumping. These movements are mainly executed by the muscles of the pelvic limbs. Movements in connection with the pectoral limbs which were acquired by the early man were throwing and striking, and perhaps pushing and pulling. The muscles of the pectoral limbs are mainly involved in those movements. The limb muscles were able to perform their functions most efficiently and successfully only with the help of the trunk muscles. Other useful movements, viz. climbing, lifting, carrying, swimming and so forth, were gradually acquired.

At a certain stage the skill factor in movements had to be introduced by the early man. It was not only necessary for meeting his alimentary and other vital needs, including self-protection, but it was also an avenue through which his desire to gain mastery over nature and the animal kingdom was expressed, and his first rehearsal was hunting. However, this skill contributed much in developing the psycho-neural aspect of the early man. He now began to discover and make implements for the skilful application of his muscles. Having up to now used natural stones for throwing and branches for striking, he began to use self-made wooden clubs and sticks, spears and lances of stone, bone or ivory, daggers and knives of stone or bone, and bow and arrows. Perhaps some crude spears or spear-like things were in use as early as in Acheulian and Mousterian Periods. Bone daggers were definitely used in the Magdalenian Period. Javelins of flint, bone and ivory were used as throwing spears in the Solutrean and Magdalenian Periods. Archery was introduced in the Magdalenian Period, if not earlier.

Dancing was introduced in the Aurignacian Period, or, perhaps, even earlier. Man's emotional entity is manifested through an urge in which are

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

religious, aesthetic, nervous and glandular elements and which induces him to express himself through rhythmic, measured and co-ordinated movements, what we call dancing. Man learnt through dancing the more skilful use of muscles and developed the ability of using right muscles in a particular movement and the power of conscious relaxation. This was an excellent psycho-neural exercise of the early man.

This was the earliest pattern of physical education shaped in the Palaeolithic Age by man. It was his natural habit. The exercise was continuous and naturally carried out in rougher conditions of existence—the rigours of the weather and various privations. In this way the pattern of his body and mind was made. Through activities and hardihood he was able to attain a vigorous form of physical life which proved suitable for the gradual unfoldment of his mental life.

Man was able to give a definite form to his mental life at the Neolithic stage of culture. The physical education of the Neolithic people included new activities in addition to the previous ones. The new activities mainly consisted of wood-cutting, hoeing, ploughing, digging, riding on the back of animals, fishing, canoeing, and perhaps rudimentary rowing. Combat activities in some shape most probably were also a part of his programme.

The oriental physical education of the Chalcolithic age, as found in ancient India, China, Persia, Babylonia and Egypt, was essentially based on those old racial activities of the Stone Ages. This early Oriental physical education was modified when passing through the Minoan, Greek and Roman stages to become European physical education. American physical education was based on the European methods. Modern physical education is the outcome of past experiences combined with present-day knowledge and practice. Modern physical education activities may be roughly grouped into: gymnastics, combat activities, athletics, sports and games, equitation, outing activities, shooting and dancing.

We are presenting here three tables in which principal physical education activities of man are given stage by stage. We have divided the activities into two main divisions: older and advanced. The older division has been again subdivided into group A, which are supposed to have been acquired first, and the group B next. Advanced activities are those which were acquired still later, when the nervous and mental life of man appreciably progressed.

The Birth of Yoga

At a certain stage of the growth of the mental life of man a new demand was created, and in meeting it the muscle had to take a different rôle. This is the static transformation of the dynamic muscle—the purposeful non-motion attitude of the body. Man's speciality and superiority do not lie so much in his external growth, but in his mental life. It has a survival value for man. Man survived, not because of his physical strength, but because of his high order of mental life. Man had to compensate purely physical strength by adding the mental factor to his muscles. We have seen that even at a very early stage man began to use his brain. A gorilla-like transformation of human life in which the mental growth is arrested is a biological degradation of the human organism and has less survival value. A condition of existence in which the mental life shrinks is more dangerous than that which brings about physical degeneracy. In fact, physical development alone cannot prevent human decay if the mental side is neglected.

He who tries to concentrate on something, he makes his body or certain parts of his body stationary. When a cat is about to jump on its prey, it first makes its body stationary. When you want to look at some finer things or hear some sound from a greater distance, you keep your body stationary for the moment. Concentration is antagonistic to motion. In a crude way, it has been demonstrated in animals, but in man it has been fully developed. Man's speciality does not lie in his constant movements, though constant movements are necessary for his life. With the gradual unfoldment of his mental life man experienced that the non-motion state of the body was absolutely necessary for developing concentration. Yoga commenced here.

According to Yoga, man's motions, executed by his muscles, are important so far that the body may be maintained in a state most suitable for the manifestation of his mental life—a mental life in which concentration predominates. This is the starting point of Yoga.

PHYSICAL EDUCATION ACTIVITY TABLE No. 1

Older Activities: Group A

	Walking	*Running*	*Jumping*	*Throwing*
Palaeolithic	Walking	Running	Jumping	Stone-throwing; perhaps crude javelin-throwing
Neolithic	,,	,,	,,	Stone-throwing; javelin-throwing
Sumerian (3200-2187 B.C.)	,,	,,	,,	Mace-throwing; javelin-throwing; throwing a curved weapon like Indian Kharga
Egyptian (3000-1090 B.C.)	,,	,,	Jumping; hop, step and jump	Ball-throwing; knife-throwing; javelin-throwing
Indian (3000-500 B.C.)	,,	,,	Jumping	Ball-throwing; javelin-throwing; discus-throwing; club-throwing; stone-throwing
Cretan (2100-1200 B.C.)	,,	,,	,,	Stone-throwing; javelin-throwing
Chinese (1557-256 B.C.)	,,	,,	,,	Javelin-throwing
Assyrian (745-626 B.C.)	,,	,,	,,	Javelin-throwing
Persian (708-330 B.C.)	,,	,,	,,	Javelin-throwing; equitative javelin-throwing
Greek (700-400 B.C.)	,,	,,	Jumping, high and broad, with halters	Javelin-throwing; discus-throwing
Roman (509 B.C.-A.D. 180)	,,	,,	Jumping	Stone-throwing; javelin-throwing; discus-throwing (later times)
Age of chivalry in Europe (Tenth to fourteenth centuries A.D.)	,,	,,	,,	Stone-putting; javelin-throwing
European (Sixteenth century A.D.)	,,	,,	Jumping, high and broad	Putting stone; throwing the bar; javelin-throwing
European (Eighteenth century A.D.)	,,	,,	Jumping, high and broad, across ditches; pole vaulting	Putting stone; javelin-throwing; throwing a wooden discus; throwing at a target
European (Nineteenth century A.D.)	,,	,,	,,	,,
Modern	,,	Running; relay; cross-country run	Jumping, high and broad; standing, high and broad; hop, step and jump; pole vault; hurdles	16-lb. shot putt; 16-lb. hammer throw; discus throw; javelin throw; 56-lb. weight throw

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

PHYSICAL EDUCATION ACTIVITY TABLE No. 2

Older Activities: Group B

	Climbing	*Lifting*	*Swimming*	*Combat activities*		
				Grappling	Striking (*a*) With hand	Striking (*b*) With club
Palaeolithic . . .	Tree	Lifting	Swimming	Grappling	Striking	Club
Neolithic . . .	,,	,,	,,	,,	,,	Club, spear, dagger
Sumerian . . . (3200-2187 B.C.)	Tree, pole, rope and wall	Mace-lifting	,,	Wrestling	Boxing	Spear and dagger
Egyptian . . . (3000-1090 B.C.)		Weight-lifting	,,	,,		Mace, club, sword, dagger, spear, stick, neboot
Indian . . . (3000-500 B.C.)		,, ,,	,,	,,	,,	Club, spear, sword, dagger
Cretan . . . (2100-1200 B.C.)			,,	,,	,,	Spear, sword
Chinese . . . (1557-256 B.C.)		Weight-lifting (later times)	,,	Chinese wrestling (similar to Pankration)		Battle-axe, lance
Assyrian . . . (745-626 B.C.)	Tree	,, ,,	,,		,,	Mace, axe, spear, sword
Persian . . . (708-330 B.C.)			,,			Spear, sword
Greek . . . . (700-400 B.C.)		Weight-lifting	,,	Wrestling and pankration	,,	Spear, sword
Roman . . . (509 B.C.-A.D. 180)			,,	Wrestling	,,	Spear, sword
Age of chivalry in Europe (Tenth to fourteenth centuries, A.D.)	Rope, pole, ladder, wall		,,	,,	,,	
European . . . (Sixteenth century A.D.)	Rope, tree, mast, wall	,, ,,	,,	,,	,,	
European . . . (Eighteenth century A.D.)	Rope, mast and wall	,, ,,	,,	,,	,,	
European . . . (Nineteenth century A.D.)	,, ,, ,,	,, ,,	,,	,,	,,	
Modern . . .	Ladder and rope	,, ,,	,,	,,	,,	

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

PHYSICAL EDUCATION ACTIVITY TABLE No. 3

Advanced Activities

	Dancing	*Archery*	*Rowing*	*Fencing*		*Sports and games*
Paleolithic . . .	Dancing perhaps in Aurignacian Period	Archery perhaps in Aurignacian or Magdalenian Period				
Neolithic . . .	Dancing	Archery	Perhaps rudimentary rowing	Perhaps rudimentary fencing		
Sumerian . . . (3200-2187 B.C.)	,,	,,	Rowing			
Egyptian . . . (3000-1090 B.C.)	,,	,,	,,	Fencing	Tumbling	Ball games, hoop-game
Indian . . . (3000-500 B.C.)	,,	,,	,,	,,	,,	Ball games
Cretan . . . (2100-1200 B.C.)	,,	,,	,,	,,	,,	
Chinese . . . (1557-256 B.C.)	,,	,,	,,			Football
Assyrian . . . (745-626 B.C.)	,,	Foot and equitative archery	,,	,,		
Persian . . . (708-330 B.C.)		,,	,,	,,		
Greek . . . (700-400 B.C.)	,,		,,	,,	,,	A kind of hockey; a ball game resembling hand-ball; perhaps rudimentary rugby football; various games
Roman . . . (509 B.C.-A.D. 180)	,,	Foot and equitative archery (not much)	,,	,,		Ball games; various games
Age of chivalry in Europe (Tenth to fourteenth centuries)	,,	Foot and equitative archery	,,	,,		Golf, cricket, football
European . . . (Sixteenth century A.D.)	,,	,,	,,			Tennis, ball games, pitching quoits
European . . . (Eighteenth century A.D.)	,,	,,	,,	,,		Skating, coasting, rugby football
European . . . (Nineteenth century A.D.)	,,	,,	,,	,,	,,	Skittles, skating, golf, hockey, bowling, cricket, quoits, tennis, rugby football, association football, curling, etc.
Modern . . .	,,	,,	,,	,,	,,	Modern sports and games

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

At a lower plane the mind is dark and dull. At this plane ignorance, miscomprehension, inattention and delusion predominate. It is degraded to almost animal level. An active mental life is the seat of desires and drives, longings and greeds, restlessness and uncontrolled actions. In a high order of mental life brilliant thinking and constructive imagination blend with the increased power of concentration and control, and the whole mental life is illuminated with the spiritual light. Man's smallness or greatness, darkness or brightness, selfishness or self-sacrifice, narrowness or broadness—all depend on the order of his mental life. His body is merely an instrument through which his mental life—his greed and sensuality or his sacrifice and love—is expressed. This does not mean that the body is of no importance. We should not forget that man is also an animal. He has his animal hungers. But in a higher order of mental life these hungers do not go beyond the normal human limit but remain under his control. In a dark and unrestrained mental life they appear in vicious forms and give an ugly picture of the man himself. Yoga makes it possible for man to attain such a high order of mental life, backed by a body which is healthful, strengthful, symmetrical and obedient to his mind, in which concentration reaches its peak.

Man, as he is known, is a grand centre of manifestation of the power, arising from and lying within the eternal and unknown reality in an inseparable form, something like waves which are inseparable from the ocean, and appears as moving, changeable, limited, perishable, conceivable and specifiable, in which his eternal principle—his absolute form, which is in reality immovable, immutable, eternal, inconceivable and unspecifiable and is in identity with the non-manifested, is masked. Yoga, as it is revealed to those who have attained illuminative life, is the realization of, absorption into and identification with the eternal reality. And the means to its attainment is also Yoga. Yoga is not merely a system, a method or a group of processes. It is a spiritual state christened as Yoga in which the eternal principle of man is revealed. Yoga was born with the growth of mental life in which concentration began to develop and reached to its limit. The secret of remaining non-moving in the moving thought-world has been disclosed in Yoga. Spiritually this is the highest aim and grandest achievement of man in which supreme knowledge is immersed in eternal bliss.

Two ideas, one conveying the sense of union and the other concentration, are component parts of the word "Yoga". These ideas in connection with Yoga originated in the early Vedic period (early Chalcolithic Age) in India. It was revealed to the sages that through the spiritual processes of union and concentration man can reach the unknown. The Ṛiṣi (seer) says in the Ṛigveda: "The limited human consciousness becomes illuminated in the Supreme Consciousness which is the greatest of all and all-knowing after their union." The word union is used here in the spiritual sense to mean the expansion of the restricted consciousness into the super-conscious state, i.e. the transformation of limited into unlimited. This union is effected through the mind. It is clearly expressed in the Ṛigveda. Yajurveda also says: "We unite our mind with the Supreme Consciousness having infinite power by our own concentration for liberation."

The spiritual union can only be effected through the mind when it is in a state of what is in Yogic terminology Asamprajñāta Samādhi (supreme concentration), which is inseparably connected with this union. In Asamprajñāta Samādhi the complete elimination of all Vṛittis (the moulding of consciousness into the form of an object, either external or internal) occurs. It is stated in the Agni-purāṇa that Yoga which is spiritual union is attainable when the Vṛittis are completely eliminated. This definition of Yoga, originating in the Vedic period, remained unmodified in the Post-Vedic period and has been accepted by the Yogins of all ages.

Patañjali's definition of Yoga is essentially based on the above-mentioned older conception of Yoga, but expressed in a language in which the concentration factor is more clearly defined. Patañjali says: Yoga is that state in which the mind ceases to function as Vṛittis (Pātañjala Yoga-sūtra).

Concentration Stage by Stage

In the ordinary state of existence consciousness is constantly being moulded into objects based on a sensory pattern. The moulding is effected either directly through the senses (perception), by the application of the knowledge of relationship (inference), through spoken or written statements

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

(direct or indirect communication), from the development of certain ideas expressed in words having no corresponding objects in reality (higher thinking), through wrong representation by the senses (misconception), or from the reproduction of previously cognized objects (memory). Ordinarily the mouldings are of mixed character. This is the state of Vṛittis of the mind. It is the common form of mind, a form in which it is recognized as such.

The extra-vṛitti-state of the mind is ordinarily unknown. Only in sleep the conscious principle does not function and therefore there is no expression of consciousness and its moulding into various forms. This coiling of consciousness is an aspect of the mind in which other forms of moulding remain in a potential form. Or in other words, the non-expression of consciousness is the grand latent period of the state of mind. We can therefore divide the state of mind into two: latent state in which the activities of the mind cease for the recuperation of power necessary to maintain the active state; and the active state in which the conscious activities are manifested. For the acquirement of Yoga the elimination of both latent and active states of the mind is the *sine qua non*. This elimination is termed Nirodha.

The elimination of vṛittis is the highest state of concentration which is attainable only through a systematized method. The characteristic of the mind is to take an image and keep it for a brief period. Then it leaves that image and takes another, and then another, and so on. Ordinarily mind tends to take different images, one after another, and cannot retain one image for a longer time. The process in which the mind is educated to take a chosen image and take the same image again and again at successive intervals without taking new ones is called Dhāraṇā (elementary concentration).

An easy method of developing Dhāraṇā is the Japa of Mantra. Mantra is the sound pattern of power which manifests as mind and matter. With the help of Mantra we can reach the power level which is beyond the manifested mind-matter level, and at that stage power is revealed as radiant energy gradually transforming into an inner consciousness. Japa is the technical term used to mean the production of a particular manifested sound form represented by a Mantra in a specific way and at specified intervals, one after another, and is continued until a certain number is finished. Dhāraṇā is more easily acquired through the Mantra-Japa.

Dhāraṇā can be best illustrated thus: It is just like the falling of drops of water from a controlled perforated vessel full of water. Each drop is approximately of the same size and each follows the other regularly. When a chosen image appears in the mind again and again in the same way it is called Dhāraṇā. Now with the help of Mantra Dhāraṇā can be comparatively easily mastered. The mind is moulded into a new image composed of two parts, form and sound, when the Mantra is said mentally. The first image stays in the mind during the period of saying the Mantra. Then there is a brief interval—a void—before it is said the second time. In this way the saying of Mantra goes on with brief intervals between. The working on Mantra is so arranged that this void period is rightly adjusted to the intervening period, i.e. the period between the throwing out of an image and the taking of a new one by the mind. In this way Dhāraṇā is acquired with the help of Mantra. In Mantra-yoga this process has been fully dealt with.

Sensory control is intimately related to concentration. Senses are the faculties of the mind for perception. When the senses function at a common level they operate through physical organs, called external sense organs. They are five in number, viz. the organs of audition, of temperature and touch sensations, of vision, of taste and of olfaction. These five are the general patterns of knowing the external objects.

A countless number of sensations or impressions of the external objects are constantly being received through the gates of sense organs. These sensations are manifold and non-specific in character. This non-specificity is then transformed into a specific sensation by a power of the mind called Manas through its functions of attention, selection and synthesis. Mind operating on the extra-physical plane is able to acquire knowledge of the external objects without the usual means of acquiring knowledge through the sense organs. The knowledge can also be acquired extra-sensorily at a higher stage of concentration. When the Manas is controlled, the other five faculties do not operate and become disconnected with the external sense organs. This is the sense-withdrawal producing a sensory void. This process is known

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

as Pratyāhāra (sensory control). It is the process through which the formation of sensory images in the mind is prevented, thus creating a most suitable mental state for concentration.

The next stage of concentration is Dhyāna (unbroken concentration). When an interrupted flow of an image (Dhāraṇā) is transformed into a continuous flow of that image, it is called Dhyāna. Again take the illustration of the falling of water, drop by drop, from a controlled perforated vessel full of water. Now if the control mechanism is removed, then the flow of water will be continuous, without any break, in one stream instead of falling down in drops. This is called Dhyāna. Dhāraṇā develops into Dhyāna. Here the image is continuous. Now the mind has been educated not to throw away a particular image but retain it.

The final stage of the process of concentration is what is called Samādhi. Dhyāna ripens into Samādhi. Samādhi again is subdivided into Samprajñāta and Asamprajñāta. Samprajñāta is that form of Samādhi in which the realization of four forms of object, stage by stage, occurs. It consists of four stages: Vitarka (deliberation), Vicāra (reflection), Ānanda (joy) and Asmitā (pure I-feeling).

Vitarka Samādhi: The image of the material object is the result of the combined actions of the senses operating through the sense-organs. The material object received by the senses is a compound of five fundamental forms of non-material energy. Of course, all objects do not contain these energies in the same proportions. This is the cause of differences in objects.

In an ordinary state, it is not possible to isolate one form of energy from the rest, as they are in compound forms. All of our senses act together though each of them plays its specific rôle. The outcome of their combined actions is the knowledge of a particular object.

In the state of the Vitarka Samādhi the power of isolation is developed. In this state we are able to "know" one particular form of energy, being isolated from the rest. When a form of energy is completely isolated from the other four and is "seen", a new form of knowledge appears which reveals an unknown aspect of the material object. It is that "essential" which goes to constitute the particular form of the sense-objects. That essential is known as Mahābhūta. They are five in number. This isolated essential is received through the Vitarka Samādhi. This gives an entirely different outlook of the external world. Here the compound image of an object vanishes and instead a newly developed isolated "image" of only one predominating essential floats. This is the extra-sensory type of knowledge of a sense-object.

Vicāra Samādhi: The essential constituting the sense-object is reducible to still finer "form" in the shape of most concentrated force being expressed as "thatness" of that essential. This is called Tanmātra. The distinctive characteristic of an essential is lost at this state. The Tanmātras, like Mahābhūtas, are five in number. The realization of the Tanmātras occurs in the Vicāra Samādhi.

In the state of the Vitarka Samādhi the mixed form, i.e. the image we get of a sense-object, vanishes and the isolated form of a particular essential appears. At this stage the whole world will appear as made only of one particular essential. In other words, the image of a particular essential concentrated upon will appear in place of the image of a sense-object and it will appear as vast. Now if concentration is applied on a minute portion of the vast essential, it will appear also as vast. Again, concentration should be practised on the minute part of that appearing as vast and this minute part will reappear as vast. In this way, by repeated applications of concentration a stage will be reached when the power of receiving the finest state of the essential—the "thatness"—will be fully developed. This is the stage of the Vicāra Samādhi.

The realization which is attained in the Vitarka and Vicāra Samādhis consists of two stages. In the first stage the realized phenomenon can be brought into the intellectual level and expressed through words. In the last stage the realized phenomenon cannot be given an intellectual form and consequently remains beyond language. The first stage of Vitarka and Vicāra is called Savitarka and Savicāra respectively, and the last stage Nirvitarka and Nirvicāra respectively.

Ānanda Samādhi: At this stage of Samādhi mind is able to go beyond the pain-pleasure phenomena. Now senses become actionless and the power of the mind relating to them becomes calm. As soon as the mind is able to go to the ultra-tanmātra stage a blissful experience occurs due to the intensification and spiritualization of love energy. This is

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the stage of Ānanda Samādhi. Now the realization of a blissful existence occurs.

Asmitā Samādhi: At this stage the realization of pure "I"—an "I" which is not mixed with or related to any non-self phenomena—occurs. Images of all things now completely vanish and only the pure I-feeling remains. This is the last stage of the Samprajñāta Samādhi.

The last stage of concentration is the Asamprajñāta Samādhi. In this stage individualized consciousness merges in Supreme Consciousness. Consciousness as it is known is an inseparable aspect of the mind. It is the common state of existence of man, giving rise to a dualistic experience. This is the knowledge of the "known". By the systematic practice of the processes of concentration the mind ascends from the state of Vṛittis to the extra-vṛitti state. At the last stage, i.e. at the stage of Asamprajñāta Samādhi, the complete elimination of vṛittis occurs. This is the stage of YOGA—of the realization of the Unknown, of the realization of the Supreme Consciousness which is actually a realization beyond realization.

Mental images acquired by the mind stage by stage through the practice of concentration from the ordinary state may be summarized as follows:

1. Ordinary state: Constantly changing sensory images in the mind.
2. Dhāraṇā state: Interrupted flow of one image (sensory in origin) in the mind.
3. Dhyāna state: Continuous flow of one image (sensory in origin) without any break.
4. Vitarka Samādhi state: Image of one "essential" (extra-sensory), being isolated from the rest.
5. Vicāra Samādhi state: Image of one "thatness" (extra-sensory).
6. Ānanda Samādhi state: A blissful experience, non-interrupted by pain and sorrow (extra-sensory).
7. Asmitā Samādhi state: Realization of pure "I" (extra-sensory).
8. Asamprajñāta Samādhi state: No images at all in the mind, individualized consciousness being expanded into Supreme Consciousness.

Concentration Exercises

Now we have a clear picture of the whole process of concentration in Yoga. It consists of four main exercises already stated: sensory control, Dhāraṇā (elementary concentration), Dhyāna (unbroken concentration) and Samādhi (super-concentration). Samādhi is again subdivided into Samprajñāta (super-concentration with super-knowledge) and Asamprajñāta (supreme concentration). Concentration exercises are the higher form of Yoga exercises and have formed a most important part of the eight-fold Yoga which is the earliest systematic form of Yoga as well as Mantra, Laya, Haṭha and Rāja Yogas which are the elaboration of the original eight-fold Yoga with more stress on different aspects of it.

Concentration exercises have been fully developed in Rāja-yoga. Samprajñāta Samādhi has been developed into four stages: Vitarka, Vicāra, Ānanda and Asmitā. Rāja-yoga has shown that the Samprajñāta can be ultimately developed into Asamprajñāta, the last stage of Samādhi. This is the chief characteristic feature of Rāja-yoga. The other three forms of Yoga, Mantra, Laya and Haṭha, only lead to Samprajñāta Samādhi.

The conception and practice of concentration exercises are possible only for men endowed with a high order of mental life glowing with intellectual eminence and backed by spiritual strength. A clear idea of the Supreme Consciousness was formed and the importance of concentrating the mind on that was realized in the early Vedic period. It was known in that early age that the invisible reality pervades all created things and also extends far beyond the material world, that the real's face is hidden by a golden vase, that the Supreme Consciousness is omnipresent, omnipotent, omniscient, having no body, no disease, no birth and no beginning. They experienced very early that the body was perishable, mind oscillating and passion strong. The process of concentration was developed and practised for knowing the unknown. It was realized that for liberation concentration was necessary, and it could be developed by systematic efforts in that direction. In the Vedas, ideas have been expressed in a language which we may call spiritual language, difficult to understand by those who are not specially taught by the masters. In the same way Yoga has also been presented in the Vedas. In the Post-Vedic period attempts were made to remove the mask and present Yoga in a more understandable way.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Motionless Attitude of the Body

Concentration demands that the whole body should be kept motionless. Deeper concentration is incompatible with the body in motion. This is the beginning of what in Yoga is called Āsana (posture).

Posture, as defined by Patañjali, is an attitude in which the body will be kept motionless and at the same time produce a feeling of ease. For the practice of concentration the motionless attitude of the body is to be maintained. One of the chief characteristic features of posture is the folded-leg factor. A most intense type of activity of man is exhibited in running. Motion is intensified in speed, and speed is best expressed in running. The speed work is principally executed by the leg muscles. Therefore the legs are apparatuses of intense activity. The energy of the body in motion in the form of extreme speed manifests through the legs. All the vital organs of the body—respiratory, circulatory, glandular and nervous—take part and co-operate with the muscular system in the work. In a word, the whole body functions in a specific way to support the action executed by the legs. This is very important for physical life, as these activities are associated with the development of the vital vigour and organic strength. But this state of the body is not suitable at the time when the mind is in a contemplative state. We need restrain the trend of the body to such intense action for intense concentration. In Yoga, an attempt has been made to prevent as much as possible the escape of energy manifesting as intense activity, thus creating a more suitable condition in which "will" will be able to co-operate fully in mental concentration, by voluntarily making the instruments of this intense action inoperative. This is most successfully effected by assuming a folded-legged posture. Therefore a motionless attitude with folded legs is considered in Yoga the most suitable posture for concentration, and experience shows that it is so.

Another important feature of posture is to maintain the erect trunk. The importance of erect posture during concentration was very early realized, and it became an essential part of posture. Man's highly developed mental life and cerebral development are intimately related to his erect posture with which the functioning of the fundamental musculature is associated. In this new human position the brain and the muscles co-operate in concentration.

But as the folded-leg, erect trunk motionless attitude is to be maintained for a longer period for the practice of concentration, it should also be easy. Discomfort and pain are usually associated with posture. They should be conquered by practice and then the posture will prove most suitable for concentration.

In addition to folded-leg posture the pectoral limbs are also made motionless by assuming Dhyāna-mudrā in which the hands are placed one upon the other at the centre of the body or by assuming Jñāna-mudrā in which the arms are stretched and the hands are placed on the knees with the tips of the index finger and the thumb touching each other. The arms are the instruments for performing complex movements and exhibiting strength. Their motionlessness and relaxation help further in concentration.

The earliest pattern of the motionless folded-leg posture seems to be what is called Pleasant Posture, in which the folded right leg is placed on the folded left one. It is the easiest form. Then it developed into Auspicious Posture, in which the right foot is inserted into the space between the left thigh and shank and the left foot into the space between the right thigh and shank. The next stage of development was what is found in Accomplished Posture, in which the left heel is set against the perineum and the right heel against the pubic bone just above the genitals. The Even Posture is the result of the modification of the Auspicious and Accomplished Postures. Then an important development occurred in the folded-leg posture with an introduction of cross-leg with foot-lock. The first stage was reached in Hero Posture, in which one foot is placed on the opposite groin. Finally it developed into the well-known Lotus Posture, in which the right foot is placed on the left groin and the left foot on the right groin. These are the principal concentration postures of Yoga.

The concentration postures formed an essential part of the eightfold Yoga and also of the Mantra-yoga, Laya-yoga, Haṭha-yoga and Rāja-yoga. Gradually other postures for concentration were developed. In Haṭha-yoga, not only the folded-leg postures were developed into more difficult

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

postures, but a system of posture exercise was evolved.

The concentration postures were developed in the early Vedic Age. The Yogins in that period could not reach the higher stage of concentration without perfecting the concentration postures. Many of the names given to these postures are found in the Vedas. The word "Sukha" means easy, which is found in Ṛigveda. That form of folded-leg posture which has been termed Pleasant Posture (Sukhāsana) is the easiest of all postures. This name, therefore, has been given to it.

Auspicious Posture (Svastikāsana) is derived from "Svasti" to mean success or prosperity (Ṛigveda), which was symbolized as a special cross mark called Svastika denoting success in an endeavour in the Chalcolithic Age in India. From "Sidh" which means to be successful (Ṛigveda) came Accomplished Posture (Siddhāsana), i.e. a posture which leads to success in concentration. Vīra from which came Hero Posture (Vīrāsana) means a hero (Ṛigveda) who is able to go deep into concentration in a difficult posture. The word "Kamala", found in the Atharvaveda and Taittirīya Saṃhitā, means the characteristic red colour of the lotus flower. This colour is the symbol of the creative energy operating within man. Brahmā or the creative aspect of the Supreme Consciousness is represented in the red colour and is seated in Kamalāsana (Lotus Posture). This is also mentioned in the Bhagavad-gītā. This creative energy usually expresses as the world consciousness representing the picture of the oscillating mind. The arousing, conveying and controlling of this great energy are required at the higher stage of concentration. The most suitable posture for this purpose is Kamalāsana. In later period Kamalāsana was also called Padmāsana (Lotus Posture), which means the same thing.

The folded-leg concentration postures were so popular in the Chalcolithic Age in India that they were portrayed in the seals. Such seals belonging to the Chalcolithic Age were discovered at Mohenjodaro. The Lotus Posture was introduced into Egypt, and it formed a part of the Egyptian gymnastic dance during the Old Kingdom (about 3000 to 2475 B.C.).

Breath-control in Concentration

In a folded-leg concentration posture, the legs and arms are in an attitude of rest and the trunk is erect and steady. When the posture is mastered, the body remains still, free from pain and discomfort and relaxed. One becomes more or less unconscious of the body. Only the feeling of breathing movements is experienced. The body is now quite still except that faint breathing movements go on.

In a healthy state we are generally unconscious of our breathing, except in running or when doing other heavy forms of exercise. In a concentration posture when the body is still and the mind is inwardly directed, we become conscious of breathing. We experience that not only the respiration —the up and down movements—is going on regularly, but that breathing causes a feeling of heaviness. Now we are conscious of an action, feeling that we are not quite inactive even in the stationary position of the body. The breathing movements prove a hindrance to concentration. But if we can manage to go a bit deeper in concentration, breathing begins to be slower.

Breathing is an indicator of the action level of our body. The energy demands of the body are met by respiration. When the body is at rest, the minute-volume of lung ventilation is minimum. Action causes an increase in the minute-volume of lung ventilation, and the increase is in proportion to the intensity of action. The increased pulmonary ventilation is effected by an increase both in rate and depth. In speed exercise, specially fast running, the maximum increase of lung ventilation occurs.

The state of the body accompanying the increased pulmonary ventilation is unfavourable for concentration. The greater the increase, the less suitable is the condition for concentration. By assuming the folded-leg concentration posture the action level of the body is minimum, and so the lung ventilation is minimum. This is a most favourable condition to start concentration. When the mind becomes comparatively calm in this posture, even the minimum breathing movements prove unfavourable for deep concentration. However, with the intensification of concentration the rate and the depth of breathing begin to go below the normal level. As concentration becomes deeper and deeper, breathing becomes slower and slower, and at a certain stage of concentration, it is almost stopped. If concentration goes still deeper, breathing actually stops.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The observation of the intimate relation of breathing to concentration resulted in the development of Prāṇāyāma, the well-known breath-control system of Yoga. The breath-control system is essentially concerned in regulating breathing in such a way as to make it helpful for concentration. It was observed that at the suspension point concentration was the deepest. This is why the breath-suspension aspect called Kumbhaka became the principal part of Breath-control, and the inspiration called Pūraka and expiration called Recaka were so regulated as to be helpful in developing breath-suspension. Moreover, will-power upon which concentration depends so much was found to be intimately related to breath-suspension. Will-power is brought into play to the maximum degree and thereby developed at a certain stage of breath-suspension.

Breath-control is the fourth limb of the eightfold Yoga. It seems that there existed some form of breath-control before it became a part of Yoga. It was, perhaps, associated with religion of the Stone Age. Most probably the intellectual Stone Age priests somehow felt the utility of breath-control in connection with prayer and concentration and practised it in some shape. This archaic breath-regulation was gradually transformed into Breath-control in the Chalcolithic Vedic Age. In the time of Ṛigveda a system of breath-culture was practised. The importance of the purification, development and control of breath-power was recognized (Śuklayajurveda). It clearly shows that Breath-control was practised in the Vedic Age. Long-slow type of Breath-control with breath-suspension was practised (Atharvaveda).

Breath-control gradually grew in importance, and improved techniques were developed. Controlled inhalation and exhalation became an important factor in Breath-control (Aitareya Brāhmaṇa). Mantra was introduced in Breath-control. The three phases of Breath-control—controlled inhalation, exhalation and breath-suspension—were practised with Mantra (Aitareya Brāhmaṇa). Breath-suspension was practised with Mantra (Śatapatha Brāhmaṇa). The length of the Mantra was regulated according to the breath-power. An inter-relation between the mind and the breath was recognized (Śatapatha Brāhmaṇa). It was further recognized that mind played an important rôle in controlling breath (Kauṣītaki Brāhmaṇa).

In the Post-Vedic period Dhyāna (unbroken concentration) and Breath-control became main parts of Yoga. The Breath-control part was called Saguṇa Yoga (Mahābhārata). Breath-control became a system consisting of five limbs and twenty-four kinds of breath-control exercises (Mahābhārata). It was practised with and without Mantras. Breath-control with Mantras was called Sabīja and without Mantras Nirbīja (Mahābhārata).

The importance of Breath-control in mind-control was demonstrated. According to Yājñavalkya mind is purified by Breath-control (Garuḍa Purāṇa). It is said that the Lord Brahmā controlled his mind through the control of breath (Bhāgavata Purāṇa). The purification of the breath, senses and mind is absolutely necessary for the successful practice of contemplation, and this purification is best effected through Breath-control (Bhāgavata Purāṇa). This is why Ṛiṣis (sages of ancient India) regularly practised Breath-control. It was their preparatory exercise for Samādhi (Śiva Purāṇa). The Lord Kṛiṣṇa himself practised Breath-control (Mahābhārata).

Yama and Niyama

Yama (self-restraint) and Niyama (self-regulation) are the first two limbs of the eightfold Yoga. Yama consists of abstinence from injury, truthfulness, abstinence from theft, sexual control in thoughts, emotion and action, and abstinence from acceptance of gifts. Niyama consists of cleanliness, contentment, asceticism, study and contemplation on God. They are actually a mode of life in which discipline has been imposed to protect the student of Yoga from physical, moral and spiritual decay. A power to dominate hunger, thirst, sleep and sexual impulses is developed. He begins to be conscious of his spiritual existence.

A student of Yoga tries to replace his ordinary thought-world with a new one through Yama and Niyama. He seriously undertakes to build this newer pattern of thoughts and tries to remould his emotions and actions according to this pattern. The fabric of one's everyday thought is mainly woven with greed and sensuality. It makes one narrow and selfish. It is a life in which a man lives for himself, for the satisfaction of his longings. His pleasure-seeking and comfort-loving bent of mind decreases his will-power and vital endurance

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

to a very great extent. He is now a prisoner in his self-woven thought-web. He needs an awakening, a right understanding of his real state. For this study has been prescribed. To strengthen his will-power and build up his vital endurance he needs asceticism. To conquer his greed he needs to be educated with the practice of non-avarice and non-stealing. Through non-avarice he learns to renounce everything except those things that are really necessary for his healthful existence. Non-stealing teaches him to conquer excessive longings for wealth. Through the practice of sexual continence he learns how to build a pattern of thought capable of piercing the sensual curtain and apprehending the inner beauty of the members of the opposite sex, and of himself too, where the fire of lust does not kindle.

He now has an inner feeling of contentment never experienced before. Cleanliness becomes his habit. His behaviour towards others now becomes regulated with harmlessness and truthfulness. The vacuum that has been created within him by the elimination of thoughts centred on mundane pleasures is now filled with devotion to God. By imposing upon ourselves the spiritual disciplines of Yama and Niyama we can elude the deleterious influence of the mode of life which we are living and create a condition for physical and moral uplift and spiritual progress.

The rudimentary forms of certain practices of Yama and Niyama were originated as early as the Stone Ages. The early Stone Age man was placed under rougher conditions of existence. He had to endure the heat of the sun, the cold of the winter, wind, rain and snow. Frequently he had to go without food and sleep. These vital habits helped to mould his mind, nervous system, internal organs and muscles into a pattern that was helpful for his survival and physical and mental development. Thus we see that the germ of austerity lay in the natural mode of existence.

With the changes of this condition of life, when man was not forced so much to struggle against the rigours of the seasons and a lack of food and sleep, he tried to maintain these virile habits voluntarily through the inspiration of religious belief. These most ancient natural habits of man were given a spiritual character in an earlier civilization of India and termed as Tapasyā (asceticism). To expose oneself in the hot season to the five fires, four from the four quarters, the fifth being the sun above, to plunge the body into cold water in the winter, to be under rain without any clothing, to fast completely, to drink only water or to be on a restricted diet, and to bear various other hardships, are asceticism. This biologically important practice was gradually incorporated into Yoga.

Cleanliness in its non-artificial form was the normal habit of the early man. He kept himself clean, externally as well as internally, by fasting, eating natural foods, outdoor life, constant physical exercise, and exposing his body to air, sun, rain and cold. In an early civilization in India it was given a sacred character and was connected with religion. An elaborate method of external and internal baths was developed from this natural practice.

Sexual privation was believed to be virtuous and a promoter of strength, endurance and courage by the early man. He tried to develop these qualifications which were so important in his life through this practice. The belief in an existence of an unknown, invisible and all-powerful being and an attempt to please him through various privations were at the bottom of the continence. More sexual opportunities were brought with civilization and, with more suitable conditions for fanning the flame of lust, the importance of sexual regulation was keenly felt and insisted on through physical education, moral teachings and religion. This ancient practice was christened by the Vedic Indians "Brahmacarya" (sexual continence). It was widely practised by great men in the Vedic period. It was regarded as the promoter of long life (Atharvaveda) and became an intrinsic part of Yoga.

The Rôle of Haṭha-yoga

Haṭha-yoga emerged from the elaboration of certain practices, especially Posture, Breath-control, cleanliness and sexual continence of the eightfold Yoga. Posture and Breath-control were transformed into distinct sub-systems, and the physical basis of concentration was expounded in Haṭha-yoga. The vital flow which supplies the necessary strength of the mind to manifest its desires to a point of satisfaction needs to be under control for creating a most suitable mental atmosphere for the growth of concentration. The Lord

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Śiva therefore says that the practice of Haṭha-yoga is necessary for success in Rāja-yoga which essentially consists of concentration with all its stages.

Haṭha-yoga, in fact, is a system consisting of a systematic method of education which aims at the purification, rebuilding, vitalization and control of the body to enable it to undertake successfully Breath-control that ultimately causes the moulding of the body into a desired pattern most suitable for moulding the mind into a form in which it is able to undergo the stages of Dhāraṇā, Dhyāna and Samādhi. The word Haṭha consists of two letters "ha" and "ṭha". "Ha" signifies the sun and "ṭha" the moon. The sun is the symbol of the expression of energy and the moon is that of the conservation of the same. Two grand processes are constantly at work in our bodies, one in which the energy is spent and the other in which the energy is acquired and conserved. The energy-consuming force is manifested by the sun-principle and the energy-building force by the moon-principle. Haṭha-yoga is that form of Yoga in which concentration is acquired through the normalization and union of the two principles by breath-control. Posture exercise, control exercise, contraction exercise, purificatory acts and other processes were employed to bring about this normalization, embracing all the processes of the body, all tissues, the entire body. Under this ideal physical condition breath-control becomes really effective and leads ultimately to the acquisition of a state of the mind in which concentration is properly developed. This is Haṭha-yoga, and breath-control is its principal process.

The first Guru (teacher) of Haṭha-yoga is said to be the Lord Śiva. The foundation of Haṭha-yoga seems to have been laid in the Vedic period. In a seal belonging to the Chalcolithic Age, discovered at Mohenjo-daro, is portrayed a three-faced human figure, surrounded by animals and wearing a horned headdress, seated in a folded-legged posture with heels touching each other and close to the body and arms extended downwards with hands resting on knees. There are two more seals of Mohenjo-daro presenting the same folded-legged posture. In one the figure is three-faced and in another it has one face. This folded-legged posture is an important posture of Haṭha-yoga named Happy Posture (Bhadrāsana). The word "Bhadra" occurs in the Ṛigveda and other Vedas and means happy. Happy Posture means that the posture is designed to give ultimately happiness. It is a development of Accomplished Posture. In Accomplished Posture the left heel is set against the perineum, whereas in Happy Posture both heels are set against the perineum. This posture is an excellent pelvic exercise. An advanced Haṭha-yoga student uses it also as a concentration posture. These seals suggest that Haṭha-yoga in some form was practised in the Chalcolithic Age in India. Moreover, the figure which is surrounded by animals has its eyes fixed on the tip of the nose. This is in Yoga called Nāsāgra-dṛiṣṭi (nasal gaze). The nasal gaze is a form of Trāṭaka (gazing), an important practice of Haṭha-yoga. It is an excellent eye exercise and is very helpful for concentration. A steatite male head of the same age also has been discovered at Mohenjo-daro with its eyes concentrated on the tip of the nose. All these indicate that Haṭha-yoga was already evolved in the Chalcolithic Age.

The Sāmaveda says that breath gives health and long life. It means that by the right regulation of the respiration through an appropriate process health and long life are attained. This process is, of course, Breath-control. It is clearly stated in the Atharvaveda that breathing, when properly regulated, lengthens life. There is also the clear instruction to avoid respiratory abuses which are antagonistic to Breath-control. This secondary aspect of Breath-control which is connected with the health of the body, is associated with Haṭha-yoga. It shows that already in the Vedic period Breath-control was practised not only in connection with concentration but also with health-building. It suggests strongly that Haṭha-yoga was in practice in the Vedic period. Of course, we find the perfect form of Haṭha-yoga in the Post-Vedic period. The exercise part of Yoga has been fully developed in Haṭha-yoga.

Yoga Exercise

Haṭha-yoga teaches that the new rôle of muscles —the static transformation of the dynamic muscles in which the non-motion attitude of the body is held and which is the basis of the development of the contemplative aspect of the human existence —becomes most effective when the dynamic

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

functioning is not ignored but rightly utilized. Haṭha-yoga aims at having the maximum result in concentration through the motionlessness of the body without sacrificing the organic soundness of the body which can only be maintained through muscle movement.

Because of the above facts Yoga exercise developed into two directions—one towards concentration and another towards motion. In this way two types of exercise were developed in Haṭha-yoga: concentration exercise based on static bodily attitudes and dynamic exercise based on motion. Haṭha-yoga has demonstrated that these two types are not really antagonistic to each other, but twin functionings of the organized whole, one co-operating with the other to the normal limit for the achievements of a higher order of mental life while maintaining a vigorous form of physical life. Yoga exercise is essentially based on the delicate static-dynamic balance of the body.

In concentration exercise the body is made motionless, respiration controlled and mind concentrated. In dynamic exercise muscles are dynamically brought into play, regulated respiratory movements are executed and the mind is concentrated on muscles and their movements. In Haṭha-yoga the dynamic form of exercise has been fully developed. The dynamic form at the height of its development consisted of breath-control exercise, placed under Prāṇāyāma, posture exercise under Āsana and Mudrā, contraction exercise under Cāraṇā, and control exercise under Mudrā and Ṣaṭ-karman. These are the main divisions. There are also subdivisions.

Breath-control and Posture, therefore, have two aspects—concentration and health. The former is the main and the latter is the secondary. The concentration aspect of Breath-control and Posture has been adopted in all systems of Yoga, but the health aspect is specially dealt with in Haṭha-yoga. Control exercise also has two aspects. Other exercises are also helpful to concentration.

Breath-control Stage by Stage

The earliest form of Breath-control seems to be the long-slow type with breath-suspension. In long-slow type inspiration and expiration are made longer and consequently slower. They were properly adjusted to breath-suspension.

The long-slow type of Breath-control seems to have commenced with inspiration per both nostrils to be followed by breath-suspension and then expiration per both nostrils. When the breath-suspension is done without strain, it is called Sahaja Kumbhaka (easy breath-control). It was the earliest type. It was done while maintaining the body in a non-motion state. It was also practised while walking.

From easy breath-control gradually developed Ujjāyī Prāṇāyāma (both-nostrils breath-control). It consists of inspiration with partially closed glottis per both nostrils, breath-suspension and expiration with partially closed glottis per left nostril. The expiration also can be done per both nostrils. The front abdominal wall can be slightly controlled or kept relaxed. This is the easy type of breath-control, in which especial locking processes are not incorporated. This is why it can be practised not only in a sitting posture, but while standing as well as walking.

From easy breath-control also developed what is known in Haṭha-yoga as Gadā Kumbhaka (right-nostril expiratory breath-control). It consists of inspiration per both nostrils, breath-suspension and expiration per right nostril.

Then one nostril inspiration phase was developed. Inspiration was made either with the right or the left nostril. Inspiration was followed by breath-suspension. One-nostril inspiration developed into Sūrya Kumbhaka (right-nostril inspiratory breath-control) and Candra Kumbhaka (left-nostril inspiratory breath-control). In right-nostril inspiratory breath-control inspiration is made per right nostril and expiration per left nostril, and breath-suspension after inspiration. In left-nostril inspiratory breath-control inspiration is done per left nostril, then breath-suspension and finally expiration per right nostril. From right-nostril inspiratory breath-control arose Sūrya-bhedana Prāṇāyāma (right-nostril breath-control). It consists of inspiration per right nostril, breath-suspension and expiration per left nostril. The difference between the right-nostril inspiratory breath-control and right-nostril breath-control is that in the latter the locks have been incorporated and the duration of inspiration, suspension and expiration is regulated in a definite order.

At the intermediate stages an attempt was made to restrain the flow of breath in inspiration and

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

expiration and to prolong breath-suspension. The flow of breath in inspiration and expiration is controlled by closing the nostrils partially. It is called Apakarṣa Kumbhaka (diminutive breath-control). This restricted process prolongs inspiration and expiration. When breath-suspension was carried to the limit, it was called Utkarṣa Kumbhaka (advanced breath-control).

The well-known Sahita Prāṇāyāma (alternate breath-control with breath-suspension) was developed from the combination of the right-nostril and left-nostril inspiratory breath-control in which the principles of diminutive and advanced breath-control were incorporated. Sahita consists of inspiration per left nostril, by closing the right nostril with the right thumb, breath-suspension, by closing both nostrils with the thumb and little and ring fingers, and expiration per right nostril, by closing the left one by the right ring and little fingers. In this manner again one should inspire through the right nostril, suspend and exhale through the left nostril. In this breath-control inspiration, expiration and suspension are measured in a definite manner. The period of breath-suspension is four times that of inspiration and the period of expiration is twice that of inspiration. The ratio is 1-4-2. In this breath-control, chin-lock act, abdomino-retraction act and anal-lock act were introduced. At the end of inspiration, chin-lock act is done, and during breath-suspension abdomino-retraction and anal-lock acts are done. At the end of suspension all the three acts are stopped. Sahita in its perfect form was developed after all those acts were evolved.

Mantra and the concentration factors have been added to Sahita breath-control. When it is done in conjunction with Mantra and contemplation it is called Sagarbha, and when it is done without them it is called Nigarbha. Mantra may be the shortest Bīja Mantra (one conjunct letter) or it may be a many-lettered Mantra, as for example the Gāyatrī (62 conjunct letters).

The elementary Sagarbha Sahita breath-control has been utilized as Nāḍī-śuddhi process. This has been termed Bhūta-śuddhi breath-control. Nāḍī-śuddhi is a most important process of Haṭha-yoga, because it is related to the development of breath-suspension power. A student having a clean and healthy body and peaceful and contemplative mind, disciplined with Yama and Niyama, temperate in eating and other habits of living, and who has mastered Postures, is fit for the practice of Nāḍī-śuddhi. When the internal purificatory state is established the vital vigour is increased, the alimentary functioning becomes normalized, bodily fat decreases to normal limit, muscles are toned, the body becomes healthy, light and charming and the eyes become clear. The necessity of sleep decreases and greater control over the sex urge is attained. And above all the power to suspend breath for a prolonged period is gained.

At the Nāḍī-śuddhi stage, an internal contraction process is applied in conjunction with breath-control to prolong breath-suspension. The first step of the process consists of the chin-lock act, abdomino-retraction act and anal-lock act. When these three acts are applied rightly and forcefully, an internal condition is created within the body in which prolonged breath-suspension becomes possible. But special bodily preparations are necessary for the successful application of the above three acts. These are the cleansing and strengthening of the body. A system of internal cleansing known in Haṭha-yoga as Ṣaṭ-karman (Six Purificatory Acts) has been introduced for the internal cleansing of the body. It may be subdivided into two: extensive and abbreviated. The abbreviated system consists of gastric cloth-cleansing, colonic auto-lavage, nasal thread-cleansing, straight-muscle act, abdomino-short-quick-breath act, and gazing. Another act, gastric auto-lavage, has also been added to them. The alimentary canal is cleansed by gastric auto-lavage and cloth-cleansing and colonic auto-lavage. The pharyngo-nasal passages are cleansed by nasal thread-cleansing. The lungs are purified and strengthened by abdomino-short-quick-breath act. The gazing is for the purification and strengthening of the eyes which is so closely related to concentration. The straight-muscle act develops the strength of and control over the abdominal muscles, thus they can play their rôle fully in the internal contraction process. The respiratory and abdominal efficiency and a clean and empty alimentary canal are absolutely necessary for the fruitful application of the internal contraction process to get control over breath.

Moreover, Nāḍī-śuddhi breath-control will not produce the desired effects if the internal purificatory state of the body is not maintained. For this

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

purpose the Six Purificatory Acts have been prescribed in Haṭha-yoga. In fact, Nāḍī-śuddhi has been classified into two: Samanu and Nirmanu. Samanu is done by breath-control and Nirmanu by purificatory acts.

That muscle state of the body in which one can apply maximum strength in internal contraction during breath-control is to be developed. This is secured by the practice of Posture, Control and other exercises as prescribed in Haṭha-yoga. A system of contraction exercise called Cāraṇā-kriyā was developed in Haṭha-yoga to contract, strengthen and control all the muscles of the body. For the perfection of the chin-lock act two special exercises were introduced. They are Meru-cālana (cervical act) and Maṇicālana (trunk-cervical act). For invigorating the whole body the exercise called Cakrī-bandha (wheel-forming act) was practised. After exercise and before concentration the practice of Audāsīnyasthiti (conscious relaxation) was prescribed. The other auxiliary factors were fasting, frugal diet, baths and massage.

At an advanced stage, breath-suspension is much helped when the ability to direct the flow of air from the lungs into the alimentary canal is developed. For this purpose the alimentary canal should be kept in a perfectly clean condition. This is done by the Six Purificatory Acts. Two special processes, alimentary canal auto-lavage and alimentary canal auto-airbath, were introduced for the purification of the whole alimentary canal. By alimentary canal auto-lavage the whole alimentary canal is adequately washed with water from the oesophagus to the rectum. After this cleansing, the atmospheric air is introduced into the stomach per mouth and then the air is made to pass into the small intestine and thence into the large intestine from where it is expelled from the body by the process of alimentary canal auto-air-bath. No instrumental aid is necessary in either of the processes. There is also a special method of introducing air into the colon for purificatory purpose. It is known as colonic auto-airbath. These advanced processes are included in the extensive system of internal cleansing.

The advanced Plāvanī (Floating Breath-control) is based on the alimentary canal auto-airbath and colonic auto-airbath. The foul air should first be eliminated from the colon and then it should be filled with pure external air by colonic auto-airbath. Then the stomach and the small intestine should be filled with the pure external air by alimentary canal auto-airbath. These advanced processes were first evolved before the development of Floating Breath-control.

The most advanced process of prolonging breath-suspension is Khecarī Mudrā. Khecarī essentially consists of the closing of the rima glottidis with the retroverted tongue to close completely the air-passage, and apply pressure in the region with the tip of the retroverted tongue. This process controls the strong impulse to breathe in and lengthens the period of breath-suspension. For this purpose the tongue is first made soft and elongated by the process of milking, stretching and cutting. Milking is the pulling of the tongue wrapped with a fine wet cloth. It should also be stretched in all directions to make it supple. Finally, the frenum linguae should be gradually cut with a suitable instrument according to a particular method. In this way the tongue should be fit for the work.

Khecarī consists of the following stages: first stage—anal-lock act; second stage—inspiration and breath-suspension; third stage—the chin-lock act; fourth stage—closing of the rima glottidis by the retroverted tongue. The Yogin Haridāsa was able to suspend breath for forty days by Khecarī.

At the last stage of Sahita breath-control the power of levitation is acquired. Now more and more control over animation is gained and ultimately it is suspended. There is no inspiration and expiration. This natural suspension of respiration is the state of Kevala Kumbhaka (natural breath-suspension). The Sahita breath-control ultimately ends in natural breath-suspension. At this stage the outwardly directed flow of the mind is fully controlled and concentration reaches the Samādhi state.

A modified form of Sahita was developed in which breath-suspension was eliminated. It is called Vāta-krama Kapāla-bhātī (alternate nasal breath-exercise). It has been included in the purificatory acts. It is a respiratory purificatory exercise. It consists of inspiration per left nostril, expiration per right, again inspiration per right and expiration per left.

For increasing the power of concentration also Bhrāmarī and Mūrcchā breath-control were developed. In Bhrāmarī Prāṇāyāma (sound producing

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

breath-control) inspiration, suspension and expiration are done with special technique resulting in the production of various kinds of inner sounds culminating in what is known as Anāhata sound (sound produced without striking, an inner divine sound) in which mind becomes completely absorbed. In Mūrcchā Prāṇāyāma (mental absorption causing breath-control), inspiration is done with increased force and a pressure is applied to the brain during suspension and is released, thus producing a condition in which deep concentration develops.

Inspiration was also done per mouth. It was done in crow-beaked fashion as if to draw in water through a pipe. The air was exhaled either through the mouth or nostrils. From this form of breathing Śītalī Prāṇāyāma (lingual breath-control) and Sītkārī Prāṇāyāma (dental breath-control) were developed. In lingual breath-control inspiration is done through the rolled tongue, then suspension and expiration per both nostrils. Dental breath-control consists of inspiration through the locked teeth with "seeth" sound, suspension and expiration per nostrils, or inspiration through the wide-opened mouth and nostrils and expiration through the mouth with the "seeth" sound.

Instead of making a long, continuous inspiration, an interrupted inspiration with breath-suspension between was practised. The interrupted inspiration consists of a series of inspirations, and each is followed by suspension. It is like inspiration-suspension-inspiration-suspension and so on. Interrupted expiration with suspension between was also practised.

From interrupted inspiratory and expiratory breath-control short-quick type of breath-control developed. The two main short-quick types of breath-control are Kapālabhātī (abdomino-short-quick breath act) and Bhastrikā (thoracico-short-quick breath act). The former is the abdominal short-quick breathing in which expiration and inspiration continue one after another without any break and without any rest between until a round is completed. The latter is the thoracic short-quick breathing in which quick expiration and inspiration are performed without any pause until a round is completed. The speed rate in either of the exercises is from 60 to 120 and over per minute.

Thoracico-short-quick breath act has been utilized in prolonging breath-suspension. This short-quick respiratory exercise creates a suitable condition for gaining greater control over suspension. This is why the long-slow type also forms a part of this breath-control. The long-slow type with breath-suspension is to follow immediately after the completion of the short-quick type. The long-slow type consists of inspiration per right nostril, suspension and expiration per left nostril.

For physical education purposes the breath-control exercises are utilized mainly for an education of the respiratory muscles, lungs, heart, blood-vessels and the nervous system, thus enabling them to function more efficiently, and for the development of the power of control over them. The respiratory exercises may be grouped under short-quick breath-control exercises, long-slow breath-control exercises and breath-suspension exercises.

Control Exercise

An exercise method, the chief characteristic of which is the conscious application of the mind to the muscles with a view to mould a particular pattern of movements in which the controlling factor predominates was developed in Yoga. The large as well as small muscles were approached and controlled. The main cause of the development of the control exercise seems to be in relation to breath-control. The internal contraction process utilized for prolonging breath-suspension and the alimentary purificatory process which is absolutely necessary for breath-control are based on the control exercise.

The control exercise seems to have started with the abdominal control. Abdominal control was necessary for breath-control and alimentary cleansing. The first stage of the abdominal control was to alter the automatic slight retraction and distension of the front abdominal wall due to respiration. The automatic slight abdominal retraction was changed into a voluntary powerful retraction in Agnisāra (abdomino-act). Abdomino-act consists of retraction of the abdomen as much as possible and its release, done quickly and without any intervals between the movements during the expiratory breath-suspension. The retraction movement reached to its highest degree in Uḍḍīyāna (abdomino-retraction act). Abdomino-retraction act consists of drawing the abdomen inward and upward to the maximum degree during the

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

expiratory breath-suspension. Abdomino-act is included in the purificatory acts whereas abdomino-retraction act is a control exercise.

The automatic slight distension of the abdomen occurring during breathing is changed into a voluntary maximum abdominal distension in the exercise known as Tunda-cālana (abdomino-control motion), an important exercise belonging to contraction exercise. Abdomino-control motion consists of three acts: voluntary distension of the upper abdomen, of the lower abdomen, and downward wave-motions of the abdomen.

The abdominal control reached its highest level in Naulī (straight-muscle act), also called Laulikī, an important exercise belonging to purificatory acts. Straight-muscle act consists of five main movements: the central isolation of the rectus abdominis, the right isolation of the rectus abdominis, the left isolation of the rectus abdominis, right and left turning of the rectus abdominis, and rolling of the rectus abdominis. Straight muscle act is closely related to the advanced control exercises of colonic auto-lavage, colonic auto-airbath, alimentary canal auto-lavage and alimentary canal auto-airbath. Colonic auto-lavage consists of drawing water into the colon per rectum without any instrumental aid. Colonic auto-airbath consists of sucking atmospheric air per rectum into the colon without instrumentation. Alimentary canal auto-lavage consists of drinking water and then passing it from the stomach to the colon via the small intestine and finally discharging it with the intestinal contents out of the body without the help of any instrument. Alimentary canal auto-airbath consists of swallowing air and then passing it from the stomach to the colon via the small intestine and expelling it per rectum from the body without any mechanical aid.

Along with the abdominal control pelvic control was developed mainly in relation to breath-control. The first stage of pelvic control exercise was to strengthen and gain control over the anal region. Two exercises were developed in this connection. The first is anal-act consisting of alternate contraction and relaxation of the anus. The second one is anal-lock act, an important control exercise in which the anal contraction is retained as per instruction. The anal canal needs to be kept in a clean condition by local cleansing with water. For this purpose anal cleansing was introduced. It is included in the purificatory acts. Anal-lock act is practised alone and later on in combination with abdomino-retraction act, straight-muscle act, abdomino-control motion and various posture exercises.

The control factor reached a very high stage of development in the well-known Mudrā named Vajrolī (gonadal control act). It is mainly designed to attain maximum sex efficiency and control. It is only for advanced students. It consists of several stages. At the final stage the urethral control is attained. It culminates in the development of the suction power per urethra. It is demonstrated in the following manner: Fluid (milk, etc.) is sucked into the bladder per urethra without any instrumental aid. At the last stage the atmospheric air can be sucked inside per urethra without instrumentation. The suction is a most important factor in the gonadal exercise.

Cāraṇā (Contraction System)

Cāraṇā is a system of voluntary contraction and control movements of muscles. It was specially developed in connection with Nāḍī-śuddhi and for strengthening and controlling the entire body. It is based on the natural and simple types of movements which the human muscles are capable of exhibiting. These movements are flexion, extension, forward, backward and lateral bending, twisting, abduction, adduction and rotation. These movements are improved in contraction system by the application of voluntary contraction and control. This not only helps better development of muscles, but greater control over them is secured and the power of concentration of the mind in relation to muscles is developed.

Contraction exercise is divided into two groups: principal and secondary. The principal group consists of contraction and control of neck, abdomen, arms, thighs, legs and feet. The secondary group consists of contraction and control of muscles connected with the wrists and other joints of the body. Callisthenics sprang from contraction and posture exercises.

The following is an abbreviated process of contraction system:

1. Neck motion, consisting of flexion, extension, lateral bending and rotation of the head, with

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

voluntary contraction, and controlled movements of platysma and sternocleidomastoid.

2. Abdomino-motion, consisting of (*a*) flexion, extension, lateral flexion and rotation of the trunk, and (*b*) hip flexion, with voluntary contraction, and controlled movements of the rectus abdominis and obliquus externus abdominis.

3. Pectoral limb motion, consisting of (*a*) upward, downward, forward and backward movements of the shoulder-girdle, (*b*) flexion, extension, abduction, adduction, rotation and circumduction of the arm, (*c*) flexion, extension, pronation and supination of the forearm, (*d*) flexion, extension, abduction and circumduction of the hand, and (*e*) flexion and extension of the fingers, with voluntary contraction, and controlled movements of the pectoralis major, serratus anterior, latissimus dorsi, shoulder-blades, trapezius, deltoid, biceps, triceps and flexors and extensors of the forearm.

4. Pelvic limb motion, consisting of (*a*) flexion, extension, abduction, adduction, rotation and circumduction of the thigh, (*b*) flexion and extension of the leg, (*c*) flexion and extension of the foot, and (*d*) flexion, extension, abduction and adduction of the toes, with voluntary contraction, and controlled movements of the thigh and calf muscles.

Āsana (*Posture Exercise*)

Āsana as posture exercise was developed in Haṭha-yoga from the motionless concentration posture. The term Āsana was originally given to the concentration posture—the third great limb of the most ancient eightfold Yoga.

Much of the elements of posture exercise was derived from ancient Indian dancing. The ancient dancing was essentially a mixture of gestural, locomotor, gymnastic and mimetic types of movements. Gesture is an attitude or a movement which is expressive of one's feeling. It was the backbone of ancient dancing. The locomotor movements of walking, running and jumping in modified forms were parts of the gestural dance. In these movements were also added the simpler type of natural movements consisting of various movements of the head, trunk, arms and legs. These non-locomotor simpler movements were gradually transformed into more difficult gymnastic movements. Dancing movements were influenced by the imitation of movements and postures of animals.

The elimination of the most ancient locomotor activities from the posture exercise has given it a new character and seems to indicate its divergence from the old type of muscular exercise of man. What induced man to develop this type of exercise? At a certain stage of development the most ancient habit of continuous exercise had to be modified due to the new situation which arose with the improved form of mental life of man. It required the suspension of activities for mental concentration and thinking. The result was the incorporation of a motionless attitude of the body favouring repose and relaxation. In Yoga the motionlessness of the body has been carried to the maximum limit for deep concentration. However, this interruption of ceaseless activities needed to be compensated by a more concentrative type of exercise requiring more systematic muscular endeavour and greater control over movements to meet the body's actual need of exercise. It was achieved in Yoga through the use of the fundamental musculature—the oldest in the history of muscle—in a most systematized, economical and fruitful manner. The limb muscles were made to co-operate fully with the spinal musculature to make the movements vigorous and more effective. This pattern of exercise is termed Posture exercise.

In their development, posture exercises took two main courses according to their sources of origin, one from Accomplished Posture and another from Lotus Posture. From Accomplished Posture a number of heel-perineal, heel-anal and heel-abdominal postures arose. An important development was Happy Posture, in which the heels, right to the right side and left to the left side, are set against the perineum, with the soles together and toes extending towards the front. It became Posterio-heel-perineal Posture when the conjoint soles and the toes extended backward with the heels placed against the perineum. When the heels were placed contrariwise against the perineum, the right heel to the left and the left one to the right side of the perineum, it became Lion Posture. The Accomplished Posture itself became modified as follows: the left heel is placed at the root of the organ of generation instead of against the perineum, and the right heel is placed above the left one. It is also called Liberated Posture. Another

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

such modification is simply the adoption of the reverse leg position, i.e. the right heel pressing the perineum and the left heel against the pubic bone and just above the organ of generation. In the third modification the anterior folding of the legs is changed into the posterior folding and the feet are placed by the sides of the anus. These two forms of Accomplished Posture are also called Adamantine Posture. When the posture is so modified as to place the feet in a manner in which the heels are set against the anus, it is called Tortoise Posture. Still there is another modification in which the heels of the conjoint soles are placed against the pubic bone and just above the organ of generation. It is also called Guarded Posture. The Guarded Posture itself took another form, in which the anus is placed on the conjoint heels.

Two important posture exercises were developed from Accomplished Posture by the introduction of the new arrangements of the feet. One is Frog Posture, in which the posterior leg-folding assumed in Adamantine Posture is maintained but carried to the back and the toes of the right foot touch those of the left. The other is the extremely difficult Abdomino-pressing Posture in which a kneeling position is assumed and the upper part of the feet are joined together from the ankle to the toes instead of the soles and the fibular sides of the feet are placed against the abdomen.

Leg-stretch postures were developed from Accomplished Posture. The first development was Great Trunk-bend Posture, in which the heel of one leg is set against the perineum as in Accomplished Posture and the other leg is extended, the body is bent in the direction of the extended leg, and the big toe of the extended leg is held with the hands. It is especially intended for breath-control. The next development was the Head-knee Posture, in which the head is bent on the knee of the extended leg while one holds the toes of the same leg with the hands. Finally, Back-stretch Posture was developed, in which the original heel-perineum factor was eliminated, both legs were fully extended, the toes were held with the hands and the head was bent on the knees.

Arm-leg and foot-head postures were also developed from the heel-perineum element of Accomplished Posture. Single Arm-leg Posture is the typical arm-leg posture in which the heel of one leg is placed against the perineum and the other leg is placed across the upper part of the arm of the same side. Similarly, Single-Foot-head Posture is an example of the foot-head posture, in which one leg is placed across the neck, while the heel of the other leg is set against the perineum. Both Single Arm-leg Posture and Single Foot-head Posture were transformed into Double Arm-leg Posture and Double Foot-head Posture respectively. In both of these postures the heel-perineum factor was eliminated, because of the changed position of the legs. These two postures were further transformed into Standing Single Arm-leg Posture and Standing Single Foot-head posture in which the leg-raised factor was retained, but the heel-perineal factor was eliminated because of the necessity of standing on one leg. Still further transformation of these two postures was effected in their combination with the Head-knee Posture in which the leg-raised factor was retained and the other leg was kept extended, the toes were held with the free hand and the head was bent on the knee. They are called Single Arm-leg Head-knee Posture and Single Foot-head Head-knee Posture.

Single Foot-head Posture and Double Foot-head Posture were further transformed into Pillow Posture and Noose Posture when they were executed in the supine position. In Pillow Posture single foot-neck lock and in Noose Posture double foot-neck lock is the main factor.

Back-stretch Posture became transformed into Forward Head-bend Posture in which the legs are placed apart, toe-hold is maintained, and the head is bent on the floor. It was further changed into Sideward Head-bend Posture in which the toe-hold was eliminated and the head was bent sideward to the floor. Both Back-stretch Posture and Forward Head-bend Posture were also practised without toe-hold. The forward trunk bend factor of Back-stretch Posture was carried in greater range in Foot-hand Posture.

From Back-stretch Posture developed the leg-raising postures while sitting with the legs extended. The most important development was Leg-raising Head-knee Posture in which the legs are raised towards the head and the head is bent to the knees. At the final stage it became Pillar Posture in which the legs are raised to a point when they are vertical and straight. In modified forms one leg is raised both in Leg-raising Head-knee Posture

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

and Pillar Posture. Another important exercise developed from Back-stretch Posture is Risen Right-angle Posture in which the buttock and the extended legs are raised off the floor.

Adamantine Posture became Supine Adamantine Posture when the trunk bent backward to the floor. When the hips are raised and the body stands on the knees and toes it is called Kneel Posture. When the head is bent backward to the floor from Kneel Posture, it is called Bent-head Adamantine Posture. When the backward bend is partly done and with the hand support it is called Camel Posture. The backward trunk bend factor is carried to a greater degree in Back Posture in which the trunk is bent backward from the standing position and the ankles are held with the hands. The backward trunk bend is carried still further in Wheel Posture. When the trunk is only bent backward horizontally it is called Modified Wheel Posture.

In supine position the backward trunk bend is done in Raised Bow Posture. In prone position also a number of backward trunk bend postures were developed. The most important are Serpent Posture, Bow Posture, Locust Posture, and Swing Posture. In prone position the backward trunk bend is carried to the limit in Serpent-king Posture. In the inverse body position the backward trunk bend is made in Modified Scorpion Posture and is carried to the limit in Scorpion Posture.

A number of forward trunk-bend postures were developed from Adamantine Posture. When the body is bent forward with the arms extended and the forehead and the hands touching the floor it is called Modified Tortoise Posture. The same movement is also executed from Kneel Posture. The forward trunk-bend is made with the head touching the floor in close contact with the knees and the heels held with the hands in Rabbit Posture.

In supine position the forward trunk-bend became trunk flexion and the leg-raising became hip flexion and pelvis-raise. There was also the combination of the trunk-hip flexion. The main trunk flexion postures are Spine Posture and its variations. The hip flexion postures are Risen Leg Posture, Sideward Leg-motion Posture and some other postures. Plough Posture is a typical pelvis-raise posture. The examples of the trunk-hip flexion postures are Head-knee Spine Posture and Knee-touching Spine Posture.

Another main line of development of posture exercise was from Lotus Posture. Lotus Posture with the crossed arms in front became Chest Posture. Lotus Posture with the crossed arms behind the back and toe-hold became Toe-hold Lotus Posture. It became Mountain Posture when the body stands on the knees. Risen Lotus Posture and Great Piercing Act were developed from Lotus Posture in which the body is lifted off the ground while supported on the hands. When the arms were introduced into the spaces formed between the legs and thighs and the body was raised off the ground, supporting it on the hands, it became Cock Posture. The further development is Supine Tortoise Posture in which the arms-between-legs-thighs factor of the Cock Posture is maintained, but the knees are raised from the ground, the neck is held with the hands and the back is placed on the ground. When this posture is done in sitting position with the body resting on the buttocks and holding the ears instead of the neck with the hands, it is called Fetus Posture.

The Lotus Posture in supine position becomes Fish Posture. When the head and the trunk are raised off the ground while the body is in supine position with Lotus Posture, it is called Balance Posture. In supine position with Lotus Posture, when the legs, hips and trunk are raised, it becomes Risen Back Posture. When the knees are carried towards the head and placed on the floor beyond the head, it becomes Lotus Plough Posture. Lotus Posture has also been combined with Peacock Posture. It is called Rolling Posture. When Lotus Posture is done in the inverse body position while the head rests on the floor, it becomes Inverse Lotus Posture.

Certain important postures were developed from the one-foot-on-thigh factor of Lotus Posture. The most important is Spine-twist Posture in which one foot is placed on the hip joint and the other leg with the knee raised erect is placed by the side of the knee of the opposite leg and the trunk is twisted to the limit. When the one-foot-on-thigh factor is eliminated and the heel-perineum factor of Accomplished Posture is adopted it becomes Modified Spine-twist Posture. When it is done with the ankle hold it is called Ankle-hold Modified Spine-twist Posture. The one-foot-on-thigh and the heel-perineum factors have been combined in Great Binding Posture.

CC-0. Kashmir Oriental Preservation Foundation Chandigarh

A number of postures were developed in which the trunk-twist factor of Spine-twist Posture was retained but the one-foot-on-thigh factor was eliminated. In Twist Posture the trunk-twist is made in a sitting posture with legs extended in front and far apart. In Hip Posture the trunk-twist is done in standing position.

The lateral trunk-flexion was also introduced in posture exercise along with other trunk-bending movements. In Angle Posture the lateral trunk-bending is done with the leg of the bending side bent at the knee. In Semilunar Posture the body is bent from the hip laterally with straight legs. The lateral flexion is carried still further in Hip-bend Posture and to the highest limit in Moon Posture in which the body is bent to the limit without bending the legs.

To counteract the harmful effect of the prolonged static contraction of the muscles of the pelvic limbs and the interruption of circulation in those parts due to prolonged static sitting postures required in concentration a number of posture exercises were developed. Those are thigh and leg postures. These postures are essentially based on Squat Posture. When the body is straightened from this posture and lowered again, it is called Thigh Posture. When it is done with one leg, it is called One-legged Squat Posture. Rising on toes with both legs in Squat Posture is known as Toe Posture. When the rising on toes with one leg is done, it is called One-legged Toe Posture.

The prolonged inactivity of the pectoral limbs was similarly counteracted by certain posture exercises. In Quadruped Posture the body is held horizontally on the extended arms and stretched legs and lowered and raised alternately. In Three-footed Posture the body is supported on one extended arm and stretched legs and lowered and raised alternately. In Arm-leg Posture the body is supported on one extended arm and one stretched leg and alternately lowered and raised. In Arm Posture the head is lowered to the hand of the supporting arm in Squat Posture.

For the development of the power of concentration certain inverse body postures were developed. These postures proved to be restful, relaxing and suitable for concentration when they were perfected. The most important are the Head Posture in which the body stands on the head, the whole body from head to foot being inverted, and the Inverse Act in which the posterior part of the head, neck and scapular region lie on the floor. The functional activities of the internal organs are profoundly influenced by these postures. The evil effect of the biped position is counteracted and a better balanced condition is created. Other inverse body postures were developed in Haṭha-yoga mainly for physical education purposes. The most important among them are Shoulder Posture and Arm-stand Posture and its varieties. In Shoulder Posture the body stands at a right angle with the neck which lies horizontally on the ground. In Arm-stand Posture the body stands on the stretched arms as well as on one arm.

In the inverse body postures balance is an important factor. To develop balance, balance posture exercise was developed in Haṭha-yoga. One of the important postures is Eagle Posture in which one stands on one leg, with the other leg encircling it. Another important posture is Knee-heel Posture in which one stands on one leg, with the foot of the other leg placed on the groin of the standing leg and the knee touching the elevated heel of the standing leg. In Heron Posture the body is balanced on the stretched arms in a squatting position. The body is balanced horizontally on the forearms in Peacock Posture. This posture was essentially developed in connection with Colonic Auto-cleansing and anorectal control associated with it. In Crab Posture the body is similarly balanced on one hand.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter II

Fundamentals of Yoga Exercise

IN Yoga the meaning of exercise has been extended and its application broadened, as the body is looked upon in a more comprehensive manner. It is based on the broader conception of man—his goal, his activities, his meaning in this world, everything. According to Yoga the material body which is a compound of tissues is the last stage of the body—an elaboration of the internal body necessary for the full expression of man while on the earth plane.

Static-dynamic Aspects of Man

From the history of the body we understand that two fundamental factors are related to man. Śakti (consciousness in the form of radiant energy) remaining static, becomes dynamic. In all stages of the dynamic existence of man there is always the static background. We can, therefore, say that man is a centre of static-dynamic powers. In the dynamic aspect are all his changes, motions, limit, world-consciousness, world experiences. At the back of all this is something more positive. It is his static aspect. In that lies his eternal non-moving indestructible principle, conscious radiant energy in a quiescent state. Conscious radiant energy in the non-manifested state is one and the same as Supreme Consciousness. There is no separate entity. Only when a stress comes, when the radiant energy is about to manifest it appears as something else. Something dynamic is forced on this static state.

The dynamic aspect of man is expressed in action and the static one is realizable through contemplation. In the lowest order of mental life the contemplative side is almost completely hidden and the active side is either semiparalysed or uncontrolled. In the higher order, the contemplative side is well developed and the dynamic side is fully controlled. Exercise from Yogic point of view is intimately related to both aspects of man, contemplative and motional.

Exercise Defined

When exercise is considered in relation to the physical body, it is a systematized method of movements of muscles done purposefully for the development of the material body. But in Yoga, exercise has been used in a broader sense. Exercise as it is understood in Yoga aims not merely at the body (material) isolated from the rest nor the mind similarly isolated, but at the whole man for his full development which culminates in the attainment of the spiritual goal. It is a means leading straight to his goal. This is why it is called Sādhana.

The exercise is sevenfold. By the application of the sevenfold exercise the whole man is influenced. It consists of purificatory exercise, posture exercise, control exercise, breath-control exercise, sensory-control exercise, and Dhyāna and Samādhi (concentration exercise). To these may be added contraction exercise and Dhāraṇā (the first stage of concentration exercise). When these factors are applied rightly the body is purified, strengthened, controlled and refined and the mind calm and concentrated. Purificatory exercise, posture exercise, control exercise and contraction exercise are related mainly to the body, Breath-control to both body and mind, and Sensory-control, Dhāraṇā, Dhyāna and Samādhi to the mind. These factors have been tried for thousands of years and have proved successful in millions of cases. To make the exercise most successful all these factors should be applied simultaneously and harmoniously. This, in short, is the whole picture of exercise in Yoga.

Exercise, therefore, is a process, or a combination of processes, so designed as to effect the gradual unfoldment of man from the narrow stage

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

of his consciousness, reaching ultimately to his static existence in which the "whole" is realized, and in the whole process his dynamic function is so regulated as to be helpful in his endeavour to attain his goal. In this unfoldment both the body and the mind play their parts. Through the process of exercise the body and mind are moulded into a pattern most suitable for his functioning dynamically as well as statically. By the influence of the exercise the body helps the mind in concentration and the mind helps the body in its firmness, refinement and control.

The exercise may be divided into two: concentration exercise and musculo-respiratory-neural exercise. The concentration exercise is for developing the power of mental concentration which reveals a new world of power, knowledge and bliss and culminates in the realization of the eternal non-destructive principle of man. It consists of the processes of Sensory control, Dhāraṇā, Dhyāna and Samādhi. The musculo-respiratory-neural exercise is to educate the body in a manner which is most suitable for concentration. The education of the body mainly consists of two parts: the purification, vitalization, strengthening and controlling of the body and the development of the motionlessness of the body. According to Yoga this is physical education and it is intimately related to concentration. Yoga physical education consists of posture exercise, control exercise, contraction exercise, purificatory exercise and breath-control exercise.

The Pattern of Body aimed at in Yoga

Yoga physical education with its various processes aims at developing the body into a certain pattern which is most suitable for the attainment of motionlessness, calmness and concentration. This type of body can be considered for our convenience from two aspects: external which is related to its external appearance, i.e. size, shape and bulk, and internal which is related to the functional efficiency of the body as a whole. We can call the first the growth factor and the second the efficiency factor. The growth factor is subordinate to the efficiency factor.

The efficiency factor is a compound of several important factors. The first of these is health. Health is not mere freedom from disease, though it is the first step to health. Health is a positive factor, an essential factor of efficiency. In a state of health not only all the organs of the body function non-interruptedly and in a most co-ordinated way, but the natural disease-resisting power of the body is at the maximum stage of development and there is a feeling of joy, power and courage. This state of the body is what is meant in Yoga by Ārogya. The normal and easy functioning of the body associated with health has been termed Svacchanda-deha. Associated with health are four factors: loveliness, youthfulness, a sweet smell in the body and vitality. The really healthy body is vital, youthful, lovely and fragrant. In such a body premature senility does not appear, and youthful appearance and vigour are prolonged. Life is extended. This is the picture of health in Yoga.

Moreover, such a healthy body is always fit and capable of making strenuous and continued exertion as it is the source of great energy. The body becomes muscularly strong, nimble and firm. This is the efficiency factor.

Such a body is not lean and ugly. It is in a well-nourished condition and at the same time free from excess fat. The abdominal region is specially maintained free from fat. It is not only muscularly well-developed but symmetrically built up, and it therefore looks beautiful.

Moreover, it is fit for concentration. It is habitually erect and well-controlled and can be made motionless when required. This type of body is termed Deva-deha in Yoga.

Fundamental Posture in Yoga

A motionless attitude of the body which is characterized by the elimination of all voluntary movements becomes really helpful if a condition is created in which the functional activities of all the vital organs are diminished to a point at which deep concentration is possible without causing any disturbance in the body. Two factors are most important in this connection—easy and non-interrupted respiration and circulation. The feeling of ease which appears after the posture is perfected and controlled and upon which concentration so much depends is intimately associated with these respiratory and circulatory conditions. This means that the diaphragm and the heart will be in a position in which they will be able to

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

function most efficiently and without any obstruction, and there will be no unnecessary pressure or drag on the great blood-vessels.

In a motionless attitude of the body the easy respiration mainly depends upon the right position of the diaphragm in the thorax. In this attitude venous circulation is not helped by muscular movements. It now depends mainly upon the diaphragmatic pump and the tonic contraction of the abdominal muscles.

The habitual posture of the chest is a most important factor that governs the position of the diaphragm. The position of the chest at the end of normal expiration is regarded as the rest position. Normally from this position the diaphragm descends in inspiration and ascends during expiration, returning to the resting position at the end of expiration. The diaphragmatic excursion is greatly increased in forced respiration. In a drooped chest the diaphragm is displaced downwards and remains there in an inspiratory position. The origin and insertion of the diaphragm are also brought closer together resulting in its inefficient function. The chest may change its shape and become narrow at the ninth rib. Under these conditions the diaphragmatic movements in normal respiration are decreased. This respiratory condition is unsuitable for deep concentration.

When the diaphragm assumes a low position in the thorax, the heart and aorta are also dragged downwards. This is an unfavourable condition for an efficient functioning of the heart, especially when the body is in a motionless attitude.

The diaphragm plays an important rôle in the venous circulation by exercising a pumping action on the inferior vena cava. If the normal range of movements of the diaphragm is diminished due to its lower position, the diaphragmatic pump becomes very much ineffective. This may also cause splanchnic congestion. This interference in the venous flow towards the heart and consequent congestion are very unfavourable for deep concentration. Adequate circulation in the brain should be maintained with ease during concentration, and, therefore, no condition should be created which affects circulation in any way. The nerves supplying the heart and diaphragm may be dragged and in some way may interfere with the nerve action.

The low position of the diaphragm causes a downward pressure on and a slight displacement of the abdominal organs. This results in the relaxation and protrusion of the abdominal wall. If this abdominal condition is habitually maintained, the tone and strength of the abdominal muscles are diminished. The pelvic organs are also pressed downwards by the pressure of the displaced abdominal organs. It may be noted here that the abdominal organs have no particular positions and their range of mobility is great. They are constantly changing their positions and in this way their functional activities are normally carried out. This means that they must have enough room in the abdomen for their full mobility. The habitual low position of the diaphragm decreases the abdominal cavity, causes unnecessary pressure on the abdominal viscera and forces them to assume certain positions not normally designed for them. This condition seems to be unsuitable for them.

In a normal state the upper part of the abdominal cavity is larger than the lower part, and this affords plenty of room for the full mobility of the viscera. In a faulty spinal posture the shape of the abdominal cavity changes. The upper part becomes narrower with the abdominal wall unnecessarily relaxed, stretched and protuberant. A change of the abdominal shape may accompany a change in the thoracic cavity in which it becomes narrower and longer, and the diaphragm assumes a low position. Under this condition the blood and nerve supply to the viscera may be disturbed.

Weakness of the abdominal muscles, especially the transversus abdominis, results in the protuberance of the anterior abdominal wall. The condition of the relaxed protuberant abdominal wall becomes worse when fat accumulates there, as for example in obesity. This abdominal fat accumulation results in an increase of the normal spinal curves because of the change of the line of gravity. The fatty abdomen and the increased intra-abdominal fat cause disturbances in normal respiration, especially when an erect posture is assumed.

When the chest droops downwards, the origins and insertions of the abdominal muscles are brought closer together and consequently they become functionally less efficient. When the chest is held high the abdominal muscles are in a right position to support the viscera, compress the abdomen and hold the pelvis up in front.

The wrong positions of the vertebrae due to

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

wrong posture may cause a pressure upon the spinal nerves and blood-vessels, thus causing an interference with the normal activities of those organs and parts supplied by them. Certain ligaments and muscles associated with the vertebral column may be overstretched while others may be abnormally shortened. If this state is continued for a long period, their functional efficiency is impaired and the normal range of motion is reduced or otherwise altered. Even the shape of bone may be changed in extreme cases.

The unfavourable thoracic and abdominal conditions are to a very great extent due to the habitual wrong trunk position in which the normal anterior convex curves of the cervical and lumbar spines and the forward concave curve of the dorsal spine are increased. In an increased lordotic position of the lumbar spine the weight of the body is largely transferred to the posterior part of the intervertebral discs and the articular facets and capsules may be crowded together and may also cause the narrowing of the size of the intervertebral foramina. The spinous processes may come close together and may even impinge on one another. The transverse processes and the cervical spine are also affected by bad posture. In an increased anterior concavity of the dorsal spine the weight of the body is mostly transferred to the front part of the vertebral bodies. The articular facets are pulled apart.

The most important spinal extensor muscles are the Sacrospinalis group (Erector Spinae). These muscles keep the vertebral column normally in straight position. When the wrong position of the trunk is habitually taken, in which the normal spinal curves are exaggerated, the right position of the origins and insertions of the erector spinae muscles are altered, and this makes them functionally less effective. Their postural tone and strength are decreased.

The spinal extensor muscles are also helped by the abdominal muscles. The abdominal muscles function in a most effective manner when the pelvis is held up in front by them. Weakness of the rectus abdominis increases the anterior convexity of the lumbar spine. Weakness of the external oblique muscle causes either lumbar lordosis or an anterior pelvic displacement.

When the vertebral column is held straight, the ribs are straight and the thorax is fixed high. A normal development of the chest and other trunk muscles is also absolutely necessary for maintaining the thorax in a proper position. If these muscles are weak, the thorax will fall downwards and will be in an expiratory position. This will cause an interference with normal respiration. On the other hand, if a barrel-shaped and highly arched chest is developed by wrong application of strength exercise, the thorax will be placed in an inspiratory position and as a result normal respiration will be interfered with.

Two points have been emphasized in Yoga in connection with the motionless attitude: erect trunk posture and proper muscular development, especially the development of the extensor muscles of the spine and thoracic and abdominal muscles. These two factors will create the most suitable condition in the body when a concentration posture is assumed. In the erect posture the trunk is held straight, back flat, chest up, abdomen slightly in, head up and chin in. The folded legs are helpful in keeping the trunk erect in a sitting attitude. The exaggerated erect posture with hollow back, chest too high, shoulders back, is also faulty and should be avoided. The erect posture will be easy with all the muscles in a relaxed state. This erect trunk posture should also be maintained in standing as well as when working in a sitting or standing position. The sense of correct posture should be developed by practice.

Proper exercise is absolutely necessary for the development of the muscles. Posture exercise has been intended for this purpose. Posture exercise is subdivided into static posture exercise and dynamic posture exercise. The right combination of the two forms produces the most satisfactory results.

Static Posture Exercise

Muscles may remain in a state of contraction or a state of relaxation. Contraction may be subdivided into postural contraction and phasic contraction. Postural contraction is the sustained contraction of a group of muscles which serves to maintain a static posture but does not result in movement. When the muscular contraction results in movements, it is called phasic contraction. Postural contraction is that state of the muscles in which a small number of fibres are involved at a time, producing what is called muscle tone or postural

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

tone, which is responsible for maintaining a posture.

All muscles of the body exhibit both postural and phasic contractions. But the postural tone is more pronounced in the extensor muscles which keep the body erect against the force of gravity. When a movement is exhibited by a group of muscles the postural tone of the muscles antagonistic to them is temporarily reduced. However, the body is always maintained in a posture suitable to a type of movements that is being executed at that time. In a certain type of movement, as for example strength exercise, a certain posture is constantly being maintained until the exercise is over. In strength movement of arms or neck the trunk and legs are kept in static postures. In locomotor movements the trunk posture is maintained. On the other hand, there are movements in which the posture of the body is constantly being changed, such as dancing or wrestling. This we may call dynamic or moving posture.

In a state of general relaxation of the body, the postural tone probably decreases, but enough is left to maintain a posture in that time. There are degrees of relaxation. The power of complete relaxation can be developed by education. It is predominantly a mental phenomenon. Even when the body is completely relaxed, that amount of postural contraction which is necessary to maintain the body in a posture remains. In a lying position with complete relaxation the total postural tone is the minimum. In a sitting posture with complete relaxation the postural contraction is greater, because the trunk is kept erect by the postural contraction of the extensor muscles of the vertebral column.

When mental control over muscle is sufficiently developed, the power of contracting volitionally one, two, three or four muscles, located in different parts of the body, or the simultaneous contraction of all the muscles of the body as well as the power of conscious relaxation of one or more muscles or all the muscles (except certain muscles) is gained. At an advanced stage the power of complete relaxation is attained.

The static posture exercise is a form of muscle education in which the body is made to assume a desired pattern of posture, which is accompanied by certain circulatory, respiratory, glandular and nervous changes and results in increased vitality, health and efficiency of the body and the creation of a most favourable condition of the body for mental calmness and increased power of control and concentration. According to the position of the body postures may be divided into three groups: horizontal, vertical and inverse. The trunk, the neck and the pectoral and pelvic limbs are involved in and the entire body is exercised statically through different postures.

The static posture exercise consists of three stages: preliminary, ease and discomfort. In the preliminary stage the body is brought to a desired particular posture by the movements of the appropriate muscles. It is the stage of movement. At the next stage the particular posture which has been assumed is maintained statically for a certain period of time. It is the static stage. This stage lasts as long as the ease feeling is not interrupted. As soon as discomfort is experienced the third stage—the stage of discomfort—is reached.

The series of movements executed to effect a desired body posture in the preliminary stage are secondary. These are not repeated but stopped as soon as the desired posture is attained. Preliminary muscle training through movement exercise is, of course, absolutely necessary for the attainment of efficiency for the postures. However, the important part of the exercise is the static aspect of the exercise in the second stage. If the posture is assumed in a right manner and the muscles are properly trained beforehand for the postures, there will be a feeling of ease at the second stage. At this stage certain groups of muscles are maintained in a contracted state while some others are in a stretched condition. It is possible by right training to get only those muscles involved in contraction which are necessary for the execution of a posture. This saves the expenditure of unnecessary energy and puts the muscles in a more balanced condition. The muscles which are involved in the posture will, of course, be in a state of postural and static contraction. The rest of the muscles should be kept relaxed by training. When the posture is perfected and well-controlled, certain muscles will be in a state of contraction (of the phasic type), certain other muscles will be in a state of postural contraction, and the rest of the muscles will be in a state of relaxation. In this condition the activity and the expenditure of energy are considerably reduced. Ease experienced at this stage is indicative of the right circulatory, respiratory,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

nervous and other adjustments in the body and non-interrupted functioning of the body as a whole. It is a condition of the body in which better health is promoted and a balance between body and mind is established. The motionlessness of the body now becomes most helpful in concentration. When the ease state is created in different static postures of the body a higher level of the vital vigour is attained. Haṭha-yoga aims not only at developing perfect health but also at creating, through different motionless attitudes of the body, a state of mind which is most suitable for greater power of concentration.

The third stage begins when the toleration point is reached. At first a feeling of discomfort is experienced which gradually becomes more and more intensified and finally turns into a positive feeling of pain. The pain ultimately becomes so intense that to maintain the posture is almost impossible. By regular practice not only the appearance of the pain phase of the third stage may be deferred, but the power of toleration of pain is amazingly increased. The vital endurance and the natural disease-resisting power of the body are increased, if the posture is retained up to a certain time-limit of the pain phase. When it is carried still further, a stage is reached which is especially favourable for the development of will-power. But finally a point comes when it becomes intolerable. At this point the posture should be discontinued.

Only advanced students are advised to go to the vital endurance and will-power points of the pain phase. Beginners should discontinue the posture when discomfort is experienced. Then step by step the duration of the ease stage should be increased. After reaching a certain time-limit, students will accustom themselves to endure discomfort experienced at the beginning of the third stage. Then, gradually, they will go to the endurance and pain points.

After the discontinuance of the posture and the assumption of the Corpse Posture the feeling of discomfort and pain will disappear. But if they continue and the body is trembling, it should be understood that the dose has been too much. In future the time-limit should be regulated accordingly.

Those students who are undergoing static posture exercise for merely physical education purposes may remain physically relaxed and mentally calm during the maintenance of the static posture. But those who are willing to utilize it for higher purposes are advised to practise concentration during this time, after sufficient control over the posture is gained. The following forms of concentration are suggested:

(1) Concentration on breathing.
(2) Breathing with Mantra.
(3) Mantra-japa.
(4) Mantra-japa with concentration.
(5) Concentration.
(6) Breathing with Mantra-japa and concentration.

For the attainment of success in static posture exercise, the body should be well prepared by dynamic posture exercise. Muscles should be made strong, enduring, flexible and well-controlled and the full mobility of the joints should be secured. This physical preparation is absolutely necessary for the execution of static posture in a most effective way.

Dynamic Posture Exercise

In dynamic posture exercise certain groups of muscles are allowed to act in such a way that a particular pattern of movements is made in which either the trunk, abdomen, neck, pectoral limbs or pelvic limbs or more than one part of the body are involved. According to their specific rôle the muscles involved in the activities may be divided into three groups:

(1) Principal muscles which are directly involved in the desired movement.
(2) Auxiliary muscles which help the principal muscles.
(3) Postural muscles which are involved in maintaining the posture suitable for the movement.

The actions of the first two groups are of the phasic type, and that of the third is of the postural type. The movement may be local or more extensive in character. In local type there may be many muscles of the body which are not involved in any way in the movement. In the extensive type practically the whole body may be involved. However, the idle muscles in a particular pattern of movement need to be kept relaxed. Therefore, in a

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

dynamic posture exercise the body is simultaneously educated in motion, posture and relaxation. Here motion is the principal factor and others are subordinate but important.

The movement factor of posture exercise is intrinsically related to the fundamental muscle groups. The earliest patterns of movements are those which are executed by the spinal musculature. The earliest spinal movements were associated with locomotion. At a higher stage the locomotion aspect of spinal movements was transferred to limb musculature, and the spinal movements became of non-locomotor type. The elimination of locomotor movements, however, did not lessen the importance of the spinal musculature. Now, being free from locomotion, its movement potential was expressed in a way essential to higher forms of organisms including man. The spinal musculature developed into three main forms: spinal, abdominal and thoracico-diaphragmatic (respiratory). The spinal muscles became the most important postural muscles in maintaining the trunk erect (in man) and were also concerned in trunk movements. The abdominal muscles functioned in three ways—in supporting the abdominal viscera, in respiration and in trunk movements.

The spinal, abdominal and respiratory muscles function as fundamental muscles in mammals including man. The fundamental musculature is involved in all movements including the movements of the limb musculature. At the human stage the pectoral limbs are free from the task of locomotion and have become a most important apparatus for exhibiting complex movements requiring great skill. Locomotor activities have been handed over to the pelvic limb muscles. They are also postural muscles in supporting the body in a standing position. But both the pectoral and pelvic limb muscles function in intimate relation to and in co-operation with the fundamental musculature and only in this manner movements are vigorous and more effective. A brief study of the different kinds of movements is necessary for the right understanding of the dynamic posture exercise.

Types of Muscular Movements

Muscular movements may be divided into two main types: locomotor and non-locomotor. Movements which cause the body to move from one place to another are locomotor movements. These movements are executed principally by the muscles of the pelvic limbs. There are three main forms of locomotor movements—walking, running and jumping. According to the rates of progression, the locomotor movements are classified into speed exercise and endurance exercise. When maximum or very great speed in progression is involved, it is called speed exercise. When the same movements are carried on at a reduced rate of speed to such a degree as to enable a person to continue the work for a prolonged period, it is called endurance exercise.

The speed-endurance exercise includes walking, jogging, running at slow and moderate speeds, sprint, broad jump, high jump and mountain-climbing. It is involved in various outdoor sports and games.

The non-locomotor type of movements is that in which the body as a whole or some of its parts are involved without resulting in progression. This type of movements is essentially based on simple forms of movements of flexion, extension, lateral bending, rotation, circumduction, abduction, adduction, pronation and supination. More extensive and complex forms of movements have been elaborated from the simpler form.

When the simpler movements are combined and executed in a manner as to effect a desired pattern of movement through a desired group or groups of muscles and in which the degree of contraction can be so regulated as to cause either a light contraction in which only a small number of muscle fibres are brought into play, a moderate contraction involving a larger number of fibres, or a very powerful contraction involving a very great number of fibres, it is called strength exercise.

Strength exercise may be classified under the following:

(1) Light Contraction Exercise.
  (*a*) Non-instrumental.
  (*b*) Instrumental.
  It is useful as it prepares the body for more advanced exercise.
(2) Voluntary Full Contraction Exercise.
  (*a*) Non-instrumental.
  (*b*) Instrumental.
  It has greater developmental value and is useful to gain control over muscles.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

(3) Body Resistance Exercise.
  (*a*) Non-instrumental.
  (*b*) Instrumental.
  It is useful for development.
(4) Weight-lifting Exercise.
  It is very suitable for the development of bulk and strength of muscles. If weight-lifting is combined with voluntary full contraction exercise and body resistance exercise, very satisfactory results in muscle-size, muscle-shapeliness and muscle-separation may be obtained. Weight-lifting becomes more effective when it is combined with wrestling which is itself an advanced strength exercise.

When the skill factor predominates in the non-locomotor type of movements, it is called psycho-neural exercise. Psycho-neural exercise includes all movements requiring great skill and control. They may be non-instrumental or instrumental. The skill factor is also applied in locomotor movements.

Psycho-neural exercise trains the higher brain centres. It develops mental concentration, attention, control, co-ordination and alertness. It enables the individual to perform various complex movements gracefully. It economizes the expenditure of energy. It shortens the latent period. It trains the memory and develops presence of mind, capacity of quick action and other mental attributes. For physical education purposes the psycho-neural exercise should be applied in relation to the fundamental musculature.

Posture Movements of Yoga

Posture movements are a systematized form of non-locomotor type of movements, based essentially on the strength form of exercise in which also are elements of psycho-neural exercise. By developing and utilizing fully the postural and movement potentials of the fundamental musculature which is intimately related to organic development, posture movements play their rôle in the attainment and maintenance of a high standard of health and efficiency which is equally necessary for a vigorous form of physical life and a higher order of mental life.

In posture movements two main principles are involved: adoption of appropriate posture and range of movements based on a graded system. The effectiveness of movements depends on them to a very great extent. An appropriate position of the body should be assumed at every stage of movement, otherwise correct execution of movement is not possible. To make the movements really effective, they should be executed in a graduated manner. At the final stage the movements are carried out to their fullest extent, causing full contraction or full stretching of the muscles involved in the movements. There are certain posture exercises in which the movements are carried out to a moderate degree, while in other postures they are carried out to the fullest extent. One posture, in this way, may be converted into another posture. Light contraction, brought about in certain postures, is converted into medium contraction and finally into full contraction by assuming appropriate postures. Body resistance also works on a graduated principle in different postures. No instrument is used in posture exercise. Only appropriate posture patterns and associated movements in varying degree of contraction are the guiding factors.

As the fundamental musculature, on which the posture exercise is essentially based, has ultimately taken three forms—spinal, abdominal and thoracico-diaphragmatic—so the posture exercise has been developed into spinal, abdominal and thoracico-diaphragmatic (or Prāṇāyāmic) postures. The last named postures are static postures suitable for the practice of breath-control in which the controlled movements of thoracico-diaphragmatic muscles are involved. The limb muscles have been utilized to effect the spinal or abdominal posture movements most effectively. These are the fundamental posture exercises. Also accessory posture exercises have been developed for the limb muscles. These may be considered as supplementary to the fundamental posture exercise.

For the most satisfactory results the posture exercise should be combined with breath-control which is especially related to the development of the thoracico-diaphragmatic part of the fundamental musculature, contraction exercise for full contraction and control of muscles, and purificatory exercise for internal purification and control of the body.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

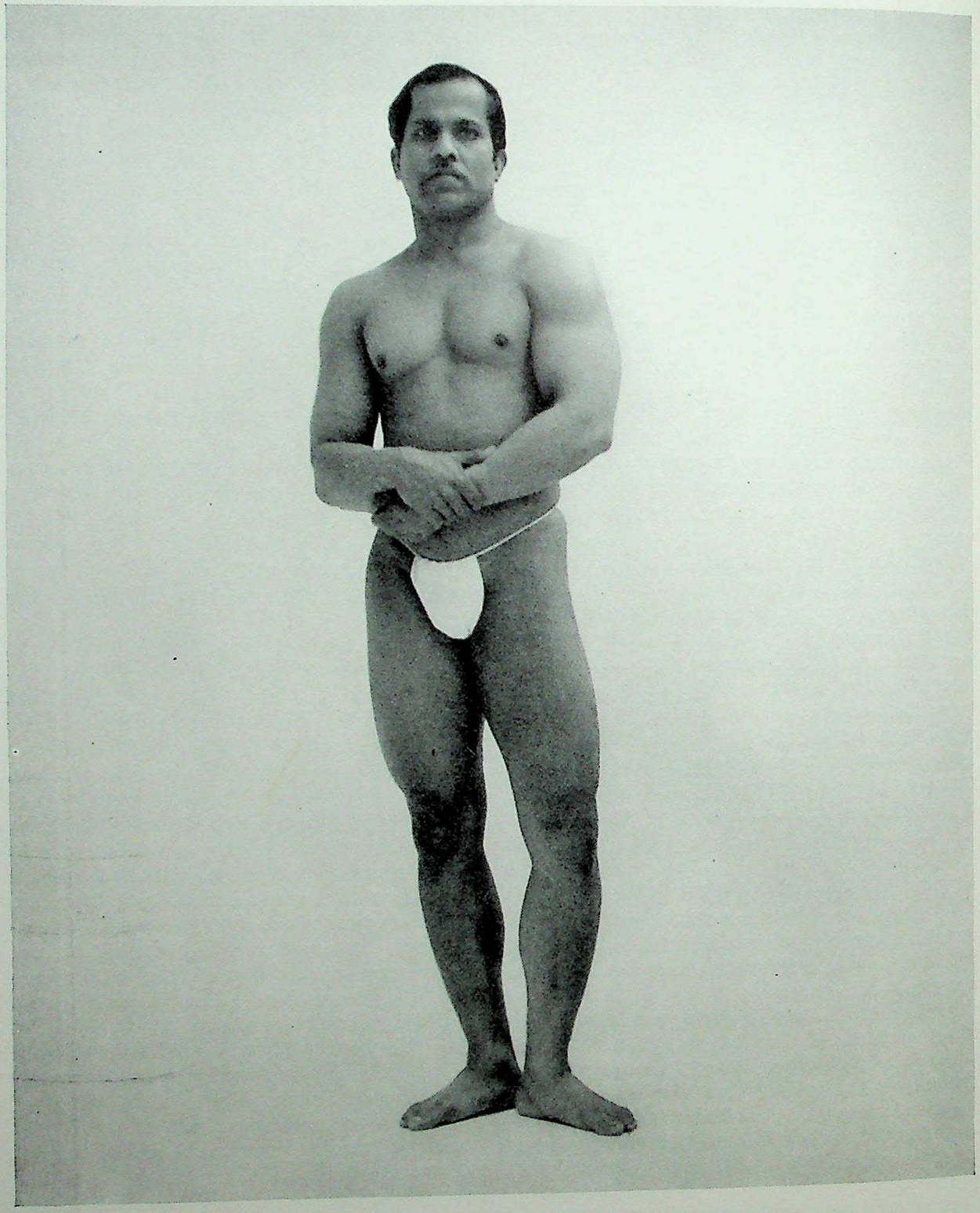


FIG. A. Beauty and power in relaxation.
Posed by Dinabandhu Pramanick.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter III

Developmental Aspects of Yoga Exercise

GROWTH and development are inherent properties of the living body. Growth is an increase in the mass of the body, that is an increase in the length, thickness and weight of the body or a part of it. Development is the gradual unfolding of powers of the body. Growth and development are closely associated with each other.

Muscular Growth

Muscle is the central organ through which the organic and nervous systems are approached and influenced. With the growth and development of muscle is linked the development of the alimentary, respiratory, circulatory, eliminative, glandular and nervous systems. The functioning of all the vital organs is adjusted to a great extent to the demand of the muscle. Muscle has played a great rôle in moulding the organic, nervous and mental apparatuses into a pattern most suitable for the physical and mental development of man. The state of the muscle expresses in a clearer language the state of the whole organism. The growth level of muscle is a clear index of the efficiency level of the whole body.

Growth is not merely associated with the changes in bulk and weight of the tissues. This morphological transformation is also closely related to the functional efficiency of the tissues and organs. The extension of the circulatory and nervous systems, the formation of new capillaries and nerve paths and other internal changes indicate the far-reaching effects of muscular growth. Muscle is the organ over which we have the greatest command and which obeys our will. We can influence the whole organism through this unique instrument, if it is properly cultured. The proper utility of this apparatus lies in its proper use. Through its right use we can touch the fundamentals of life. Muscular growth is not merely to muscularize the body but also to help the body in its attainment of organic and nervous health and efficiency and intellectual, moral and spiritual powers.

Fatty Accumulation

The increased amount of subcutaneous fat may also occur with the actual growth of muscles. Muscles may look larger than their actual size when fat accumulation surrounding them takes place. When exercise is insufficient and the food intake is heavy, there is less increase of muscle tissues and more increase of fat. Even when exercise is heavy, if the amount of food taken exceeds the actual needs of the body, the surplus will be deposited as fat. The proper blending of exercise and diet is absolutely necessary in preventing undesirable fat accumulation and promoting actual muscular growth.

A High Standard of Muscular Growth

It should be clearly borne in mind that a high standard of muscular growth cannot be attained unless suitable exercise is undertaken. The exercise should, of course, be combined with right diet. When the diet is not well regulated, exercise alone cannot always check the fat accumulation. This is why we find many exceptionally strong men who have not controlled their food intake, are fatty in spite of their taking plenty of exercise.

Yoga exercise aims at attaining a degree of muscular growth which is absolutely necessary for building and maintaining organic efficiency to a maximum extent. The unnecessarily lean and unbeauteous body is not the normal body. We can, of course, shape the body on a more slender pattern by regulating exercise and diet without lowering the vital vigour. But the level of growth should

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

FIG. B. An imitation of the Lord Kṛiṣṇa holding the Govardhana rock.
A most symmetrically developed body.
Posed by Dinabandhu Pramanick.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

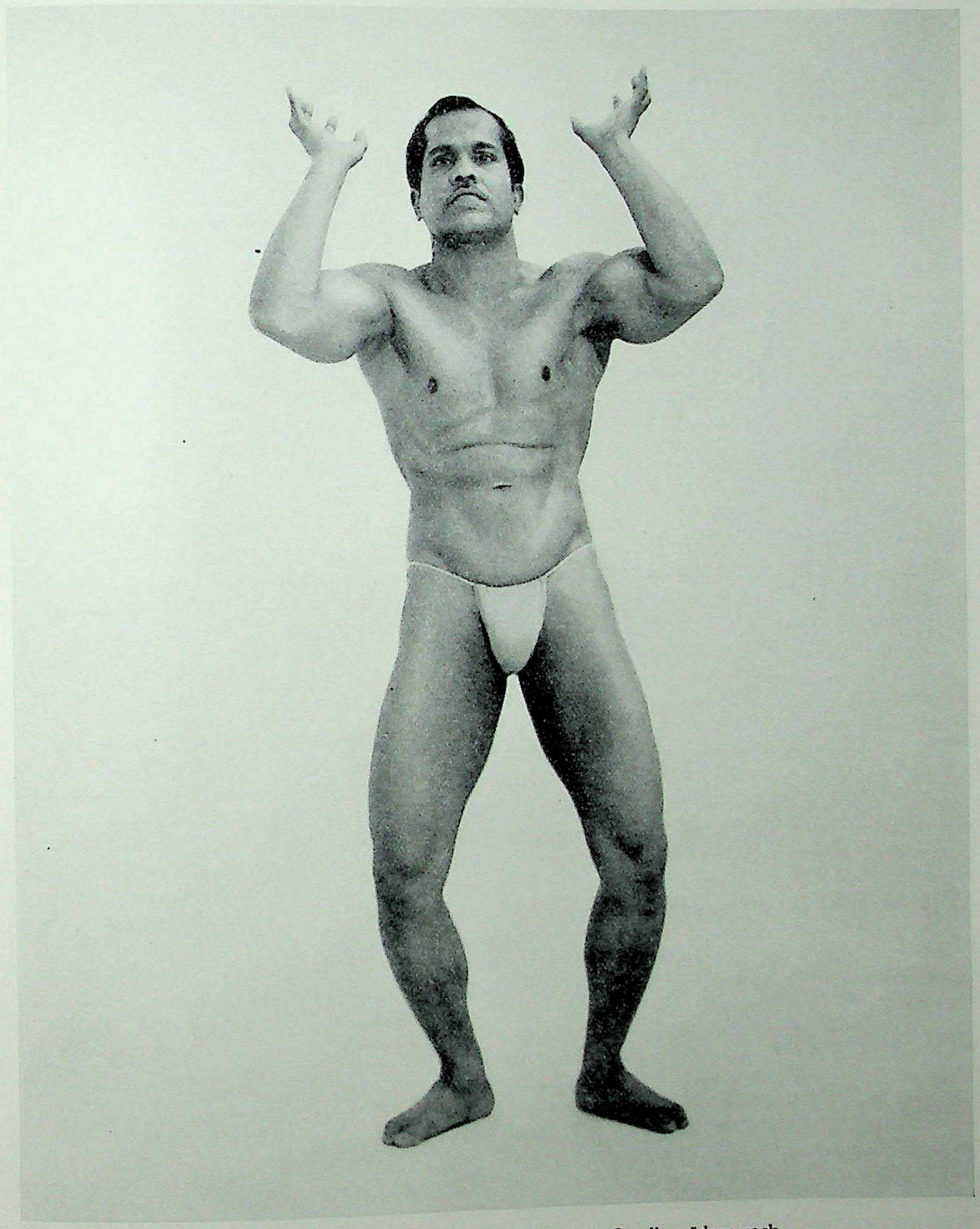


FIG. C. An imitation of Mahāvira carrying the Gandhamādana rock.
Posed by Dinabandhu Pramanick.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

not be allowed to drop below normal requirements.

On the other hand, we can attain a greater muscular growth, growth over and above the health needs of the body. But in attaining this "extra" growth, if the health habit of the body is disturbed, it becomes most undesirable. If in an attempt to attain rapid and excessive muscular growth, we adopt unnatural and wrong methods, our object will be defeated.

"Forced nutrition" is often employed in attaining extra muscular growth. By this means the body may be unnecessarily burdened with deposits of undesirable substance. This condition causes the impurification of blood, decreases vitality and forces the body to develop disease in order to eliminate quickly the accumulated morbid material. In Yoga organic strength, endurance, agility, speed and general physical fitness are not sacrificed for the bulk.

Muscular Development

Muscular development means the gradual unfoldment of power lying dormant in muscle. A well-developed muscle is able to exhibit increased power. Muscular power may be divided into four: strength, speed, endurance and skill.

Strength is that power of the muscle by which the external resistance applied to it is overcome by its powerful contraction. The strength of a muscle depends upon its cross-section area. Strength is best exhibited in weight-lifting. Speed is that power of muscle by which a series of movements are executed in the shortest space of time by overcoming muscle viscosity. Sprinting is an example of extreme speed. Sprinters have usually lower viscosity of muscle. Endurance is that power of muscle by which movements are carried on for a prolonged period. The typical example of endurance is the Marathon run. The skill factor is associated with the ability of muscle to perform ordinary movements easily and economically, and more complicated movements accurately, efficiently, gracefully and easily.

The development of strength, speed, endurance and skill is not so much for the purpose of exhibiting them. These muscular achievements are closely related to the organic and nervous development and very useful in social and national life. Strength gives a feeling of well-being and power, develops self-confidence and fearlessness, and excites the desire for work. Strength and the feeling of strength are inseparable parts of health. When health begins to decline, strength also begins to ebb. This lack of strength is reflected on the body as well as on the mind. Correct posture which is necessary for nervous and organic health depends to a great extent upon the strength and tone of muscles. Speed and endurance are specially connected with the development of organic vigour.

Skill is necessary in all the activities of daily life if they are to be performed with ease, grace and power. When skill is not properly developed unnecessary nervous energy is expended, unnecessary muscles are used, movements are done in a more clumsy manner, more strain is required and there is less enjoyment in the work.

Muscular power in all forms is essential for living healthfully, working vigorously and thinking efficiently. The ability to do work accurately, continue work for a prolonged period and endure the work without any unhealthy reaction on the organism are associated with muscular development. Muscular power is a chief element in a dynamic personality.

Size and Power of Muscle

The development of muscular power is not wholly independent of muscular growth. The size of muscles is particularly dependent upon the form of power the muscles have to manifest. The form of power to be developed depends upon the nature of exercise performed, and along with the development of that power the type and size of muscles most suitable for exhibiting that power are developed.

Muscular development does not always occur in proportion to muscular growth. Exercise is the main factor for muscular development. Diet occupies a secondary position. Exercise can be so regulated as to develop mainly the size of the muscles.

Muscular Power

The exhibition of muscular power is accomplished by the contraction of the skeletal muscles. Four factors are component parts of muscular movements: strength, speed, endurance and skill.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

FIG. D. Kṛiṣṇa with His divine flute. Beauty in form and grace in motion.
Posed by Pārvatī Devī (Karin Schalander)

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

In a particular type of movements either one or more factors may predominate. In sprinting speed predominates and in long-distance running endurance prevails. In lifting heavy weights, especially of the slow type, strength predominates. In quick lifts, such as snatch or swing, strength is backed by speed. In wrestling strength, speed, endurance and skill are involved. Skill is especially involved in various sports and complex muscular movements.

Is it possible to develop all forms of power simultaneously to a high standard? Many facts are involved in this matter. We know that neither a sprinter nor a Marathoner can overpower a wrestler or defeat a weight-lifter. Similarly, neither a wrestler nor a lifter is expected to outrun a sprinter or run a Marathon race. Can we conclude from these facts that a wrestler does not possess speed and endurance or a weight-lifter is incapable of exhibiting speed and endurance? A wrestler exhibits not only wonderful skill, but great speed and alertness when executing various holds. A long continued wrestling and the performance of 4,000 squats and 2,000 push-ups at a time done by a wrestler are a great test of endurance. It is not possible for a runner to perform these. A weight-lifter exhibits his power of endurance by lifting heavy weights for a prolonged period, and both strength and speed in quick lifts. A sprinter exhibits his speed in locomotion and a wrestler in other forms of motion.

These observations seem to indicate that the body is able to exhibit a high degree of a particular form of power in a particular way, when specially trained for it. In other directions his performances may be only mediocre. A particular type of exercise moulds the muscles and nervous and organic apparatuses in a way which is most suitable for exhibiting that particular power in a particular manner. So, when the muscles are trained for speed in locomotion, man creates records in sprinting. Similarly, when the muscles are trained by weight-lifting, he is able to lift very heavy barbells or dumb-bells. Further, if the muscles are trained to overcome resistance in some particular manner, it does not necessarily mean that he will be able to overcome resistance in other directions in which his muscles have not been trained. Similarly, skill improves only in relation to a particular form of activity in which he is trained. Skill in one activity does not necessarily improve skill in other activities in which he is not trained.

Specialization in Physical Development

A very high standard of development of physical power is a matter of specialization. A specialized achievement either in strength, speed or endurance requires specialized training. It seems that for specialization all resources of the body are to be mobilized in a particular way and the whole energy of the body is to be concentrated on this particular achievement. Consequently, the body is unable to spare any great amount of energy for other muscular endeavours. When nearly all the available energy of the body is utilized in specialized muscular development, a lack of desire usually appears which discourages the individual to make real efforts in other directions. We know that for the attainment of a high degree of mental development continued and intensified efforts are the *sine qua non*. The lack of desire associated with specialized muscular development is the natural means to protect the body from being severely damaged. This condition of existence is unfavourable for the development of a high order of mental life. The energy and concentration required for its acquisition are not sufficient in this state. This is why in many an instance we find men who attained a high degree of physical development without a corresponding mental development. These instances certainly do not prove that physical development is antagonistic to mental development and physical education is detrimental to mental life.

It is not actually physical development and physical education which are responsible for mental dwarfness. A lack of proper understanding of man and an unphysiologic and unpsychologic approach are at the bottom. In these cases muscles have been overemphasized.

It is true that man's speciality lies more in his mental life, especially that form of mental life in which higher mental powers are fully manifested. If we create an artificial state of the body by wrong application of physical education in which the body is unable to play its proper rôle in mental life and take part in exhibiting mental and spiritual activities which are component parts of a higher

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

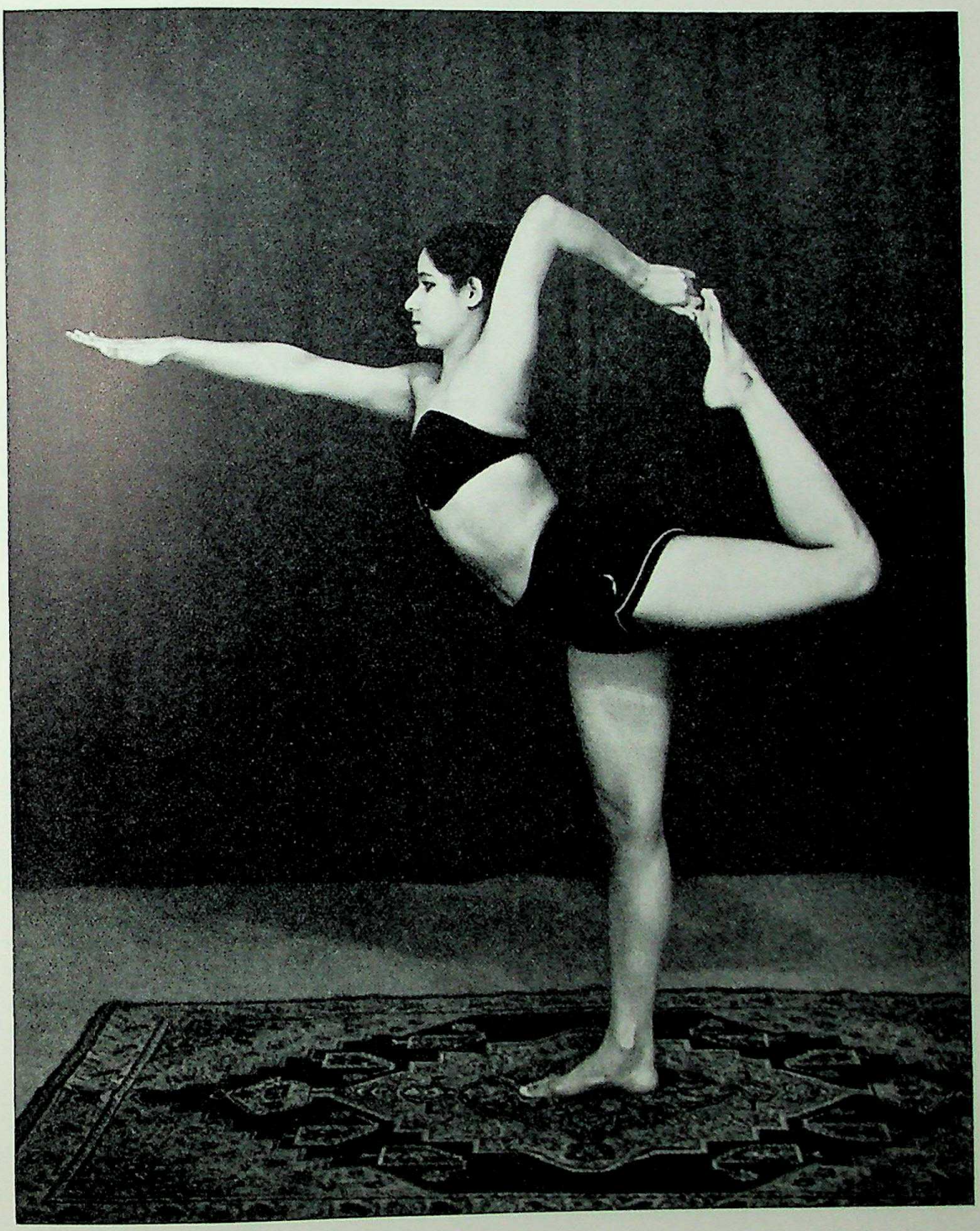


FIG. E. Feminine beauty in a Yoga posture.
Posed by Renu Ghosh.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

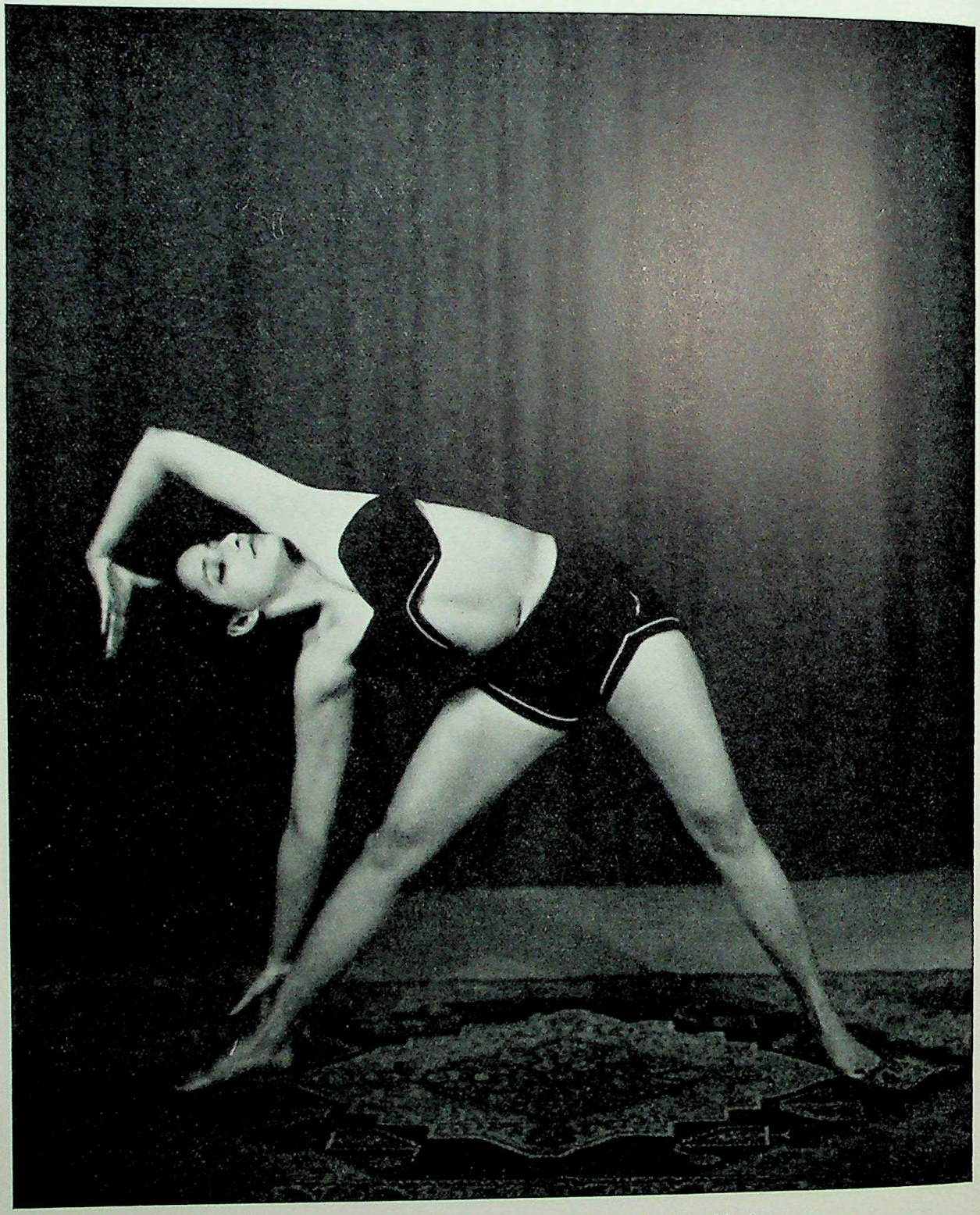


FIG. F. Flexibility and grace in a symmetrically developed body.
Posed by Leela Ghosh.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

order of mental life, human development will be hopelessly impeded. Mental life is, in this state, sacrificed, to a great extent, for physical specialization.

On the other hand, we should not forget that body is an indispensable factor of mind and its activities. In a well-developed mental life not only thoughts and attitudes, but actions and behaviours are moulded into a definite form, indicating a close relationship between the physical and mental life. The functional efficiency of the bodily organs plays a part in shaping mental activities. In the expression of mind not only the brain but the whole body takes part. The vital organs, the endocrine organs, the blood, the nervous system, the muscles, all have to play definite parts in the functioning of the mind. So the state of the body cannot be overlooked in mental life.

There are, of course, cases in which a giant mind dwells in a frail body. A careful analysis discloses many interesting and instructive facts. First, a large number among them are not actually physically inferior, rather they are above the average. Usually their physical vigour is overlooked, because these persons do not happen to show it through appreciably increased muscular growth. There is also the slender type in which great muscular development does not take place. But they may not actually lack in vitality. The slenderness of many vigorous people may also be due to their extreme abstemious habits of eating and living. There are also people who are constitutionally vigorous by birth and they utilize this congenital advantage in developing the mind alone, neglecting the body. It has been observed that they may go on well up to a certain age, and then begin to show signs of mental sluggishness with diminution of health and vigour. These mental giants ultimately become the victims of various chronic diseases, and their minds also become dull. The thought-machine is an exceptionally efficient machine, which is able to maintain its functional power even under very unfavourable conditions. It does not prove that bodily health and development are neither connected to nor necessary for mental development. Bodily negligence should not be encouraged for the glorification of the mind by picking out exceptional cases.

Gotama the Buddha, the Great Spiritual Teacher and founder of Buddhism, developed His body by regular exercise. His well-developed and vital body was not antagonistic to His spiritual awakening and realization of the invisible higher reality.

Jesus Christ kept His body healthy, vigorous and clean by physical exercise and mental and physical disciplines, and by leading a simple and well-controlled life. He worked hard in His younger days in the carpenter's shop of Joseph, which helped to strengthen His body. He walked long and also up and down the hills day after day when preaching His gospel. It is erroneous to suppose that the Bible does not approve physical education and that Jesus was a weakling. Says St. Paul: "Know ye not that ye are the temple of God? If any man defile the temple of God, him shall God destroy, for the temple of God is holy, which temple ye are. Therefore glorify God in your body."

The necessity of keeping the body full of vitality, healthy, strong and purified for higher spiritual achievements has been fully recognized in Yoga. But the type of muscular development in which the mind is ignored is not encouraged in Yoga. Yoga aims at developing a balanced type of body, not a specialized type.

Health-level of Physical Development

That level of physical development which is associated with a high degree of the vital vigour and makes the body able to perform all activities of daily life with ease and efficiency and for a prolonged period when necessary, accumulate plenty of reserve force, mobilize the bodily resources to the maximum degree and endure this heavy expenditure without unhealthful effects on the organism, has been the aim of Yoga physical education. That amount of muscle tissue which is actually needed or associated with this type of physical development is developed by Yoga exercise. As the body functions organically most efficiently in this state, thus maintaining perfect health, this we call the health-level of physical development.

In this condition of the body strength, speed and endurance are developed into a balanced state. There is sufficient strength to maintain all activities in daily life plus various other activities requiring strength to a reasonable extent. There is sufficient endurance to be able to carry out activities for a prolonged period. Vital endurance

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

is associated with it, which enables the body to endure lack of food, sleep and other privations and inclemency of weather. Bodily movements are usually easy, graceful and well-controlled. There is power to execute non-locomotor and locomotor movements reasonably swiftly. The muscle mass is in proportion to the physical development, and the body is muscularly beautiful and symmetrical.

In this state of the body the healthful functioning of the vital organs is not interrupted by the factors associated with muscular development. The body is in balance with the internal organs and the muscles. Figs. A, B, C, D, E and F show the health-level physical development, both masculine and feminine, attained through Yoga exercise combined with right diet, internal cleansing, relaxation and concentration.

This state of the body is the most suitable for the actualization of mental powers. Under this condition the energy of the body is wasted neither in overcoming the conditions that disturb health nor in attaining too much physical specialization, but is reserved and rightly utilized for mental development. This is a state—a balanced state—in which intellectual, contemplative, organic and muscular powers are developed harmoniously.

After attaining successfully physical development to a health-level, further physical development may be attempted if desired without sacrificing the established balanced condition. It requires specialized training. If this training does not cause any disturbance in the vital functioning of the body nor proves to be unsuitable for intellectual and contemplative life, it may be undertaken. But if it is experienced that the time devoted to the special training, the type and amount of exercise necessary for that purpose, the type of diet, amount of sleep and other alterations of living associated with the special training, create a condition in which the balance between the muscles and the rest of the body and between the body and the mind is difficult to maintain, the specialization should be sacrificed in favour of balanced development.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter IV

Health and Yoga Exercise

HEALTH is a state of the organism in which all organs function uninterruptedly and vigorously and in full co-operation with one another for a longer survival and the best development of the body, enabling man to express his best through his intellectual, moral, spiritual and physical activities. A vital body and a dynamic mind are intimately associated with vital health. When health is established, the body becomes a fitter machine, more enduring, more powerful, better developed and better controlled, the mind becomes more vigorous, more imaginative, better balanced and more contemplative and the emotions more normalized and spiritualized.

Vital Endurance

The state of health is associated with the maintenance of the organic state of the body at a certain level of constancy normal to an individual in spite of his being unceasingly influenced by extremely diverse and intense, and often very unfavourable, changes of his environment. This organic state is the result of the adaptive functions of the body in which all the functional systems take part through their incessant, but purposeful and methodical, activities. When the activities of the functional systems reach a certain level and are most successfully balanced between themselves and in relation to the steady organic state, vital endurance of the body is fully activated, resulting in natural healthfulness, increased natural disease-resisting power and life-extension.

To maintain the desired level of organic activities most suitable for health the nervous, glandular, circulatory, respiratory, alimentary, eliminative and muscular systems require to be at a certain functional level in which all their activities are most efficiently integrated. In this integration blood plays a most important rôle. Abnormal activities of the functional systems and their disharmony are mainly caused by adopting a mode of life which is not adjusted rightly in the organism. Various unsuitable environmental conditions also influence the functional systems adversely.

Vital endurance is congenital as well as acquired. Inherent endurance may be very much modified by an unsuitable mode of life. On the other hand, a suitable mode of life increases vital endurance.

Patterns of Thoughts and Actions

Our mode of life is actually an expression of our thoughts and actions. The level of thoughts and actions influences the level of the activities of the functional systems through the mode of our life. The patterns of thoughts are moulded by a mixture of spiritual, intellectual, emotional and organic factors in varying proportions characteristic to an individual. Actions are manifested thoughts.

The patterns of thoughts and actions which are associated with alimentary excesses, artificial hungers, unhealthful sexual activities and inhibitions, greeds and various softening habits are coarse in character and obstructive to harmony and contemplation and cause disturbances in the organic functions. A mode of life based on such types of thoughts and actions is unsuitable for the optimum development of man. Vital endurance cannot be fully developed under such conditions of life. The only way to counteract the deleterious effects of such a life is to introduce a discipline in which thoughts and actions are moulded into a new pattern through regulations, privations and activations and which is most suitable for establishing the vital health level of the body. In Yoga this is done through Yama, Niyama and various exercises.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Rôle of Muscular Exercise

Muscular exercise plays a most important rôle in controlling and bringing to a desired level of activities of all the functional systems by utilizing rightly the muscular-organic relations existing from the birth of muscle and developed in succeeding stages. The most fruitful approach is made through the fundamental musculature by raising its action-level to a certain height through measured movements of definite patterns in which the muscles and other functional systems are in perfect balance. This we may call the body's health-level actions. Vital endurance and natural disease-resisting power are fully developed in this state of the body.

In Yoga the fundamental movements have taken a specific form of spinal, abdominal and thoracico-diaphragmatic movements applied both statically and dynamically to influence most effectively the organic state of the body in which the health-level is most satisfactorily established. This type of exercise is not so much for muscular specialization, but for natural healthfulness and immunity. Specialization, if desired, can be carried so far as it is possible without breaking the harmony between it and the health-level.

Blood Purification

Exercise becomes really effective when it is combined with the blood purification method. The following is the general outline of the method:

1st Stage

Fasting for 3 to 5 days, with warm water drinking, gastric lavage and colon lavage. Sun bath, air bath, and general bath, and restricted exercise, if required.

2nd Stage

Special diet:

(*a*) Break the fast with orange juice.
(*b*) Take acid fruits for a day or two.
(*c*) Then take exclusive milk diet or milk-fruit diet for 10 or 12 days.

3rd Stage

Normal diet.

A lacto-vegetarian diet is generally more suitable. It is eliminative as well as nourishing. Exercise should be a regular part of the daily programme. Proper application of colonic and gastric lavage should be made. Sun bath, air bath, cold baths and occasional warm baths should be taken. Periodical fruit diet, raw diet or milk-fruit diet are very helpful.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter V

Practical Application of Yoga Exercise

THE dynamic form of posture exercise is really the first stage of Yoga exercise, which promotes health and development of the body. But its effects are not limited here. It prepares the body, through the development of the degree of strength, endurance and flexibility which is required for the perfection and control of a posture pattern, for the successful practice of static posture exercise, the advanced form of Yoga exercise designed for developing vital endurance to a high level, and makes the body most suitable for concentration.

Time for Exercise

The afternoon or evening (before dinner) is the best time for taking dynamic posture exercise for developmental purposes. The next best time for developmental exercise is three or four hours after breakfast. If these times are not available, developmental exercise may be taken early morning (before breakfast). Early morning is the most suitable time for breath-control exercise and static posture exercise. Constitutional exercise may be taken in the morning before or after breakfast or in the evening.

If posture exercise is taken in the evening, constitutional exercises may be taken either before or after breakfast. If posture exercise is taken in the morning, constitutional exercise may be taken in the evening. When posture exercise is taken both in the morning and evening (as, for example, static exercise in the morning and dynamic exercise in the evening), constitutional exercise may be taken after breakfast or at any other time suitable to a person. One should rest for an hour or at least 30 minutes, after exercise, before taking a meal.

Occupation and Exercise

If the muscles are not practically used at all in an occupation, all the muscles of the body should be adequately used by general posture exercise. If in an occupation only certain groups of muscles are especially used, they should be exercised moderately by posture exercise and the unused muscles should be adequately exercised. If the occupation is light, heavier forms of exercise should be taken and vice versa.

Condition of Health and Exercise

The form and amount of exercise depend to a very great extent upon the condition of health of a person taking exercise. If he is in poor health, he should commence with a lighter form of exercise, if strong with a heavier form. If a man is weak and his work is heavy, it is good for him to stop work and do light exercise until some improvement in his health takes place. If it is not possible to stop work, it may be advisable for him to take only some light constitutional exercise. Generally, it is better for a man of poor health to start with some suitable form of constitutional exercise till his condition improves.

When Exercise is Contraindicated

One should not take exercise when tired, for then one needs rest. One should not take exercise when nervously depleted, for all one's organs have been overworked and one needs rest. Exercise should be avoided when there is inflammation and any acute disease.

During an acute disease the body tries to eliminate the excess of poisons accumulated there by increasing the functional activities of all the eliminative organs to a maximum degree. The body needs all the available energy for this purpose alone, and nothing can be spared for exercise

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

or even digesting food. Also the nerve energy during this period is more or less depleted. Furthermore, the body during this period does not require to be stimulated by exercise, for the functional activities now have been sufficiently accelerated.

Exercise is usually contraindicated at the beginning stage of tuberculosis, gastric and intestinal ulcers, polyneuritis, high blood-pressure, severe heart disease and dropsy. Exercise should not be taken when one is injured. In strain and sprain, especially at their acute stage, exercise should be stopped.

Exercise and Age

Muscular exercise is necessary not only for adults, but at all ages from birth to death. Of course, certain types of exercise are more suited and beneficial at one age than at another. The following suggestion may be helpful:

1st year—spontaneous movements; some play exercises.

2nd to 5th year—walking; running; various forms of games.

6th to 9th year—walking; running; games; deep breathing exercises; light dynamic posture exercise; correct posture and easier folded-legged postures (only to be assumed for a brief period).

10th to 12th year—walking; running; jumping; throwing; swimming; dancing; light dynamic posture exercise; deep breathing; correct posture; practice of folded-legged postures.

13th to 16th year—walking; running and all other forms of speed-endurance exercises; breath-control exercise; correct posture; light developmental dynamic posture exercise; practice of folded-legged postures.

17th to 30th year—all forms of constitutional exercise; breath-control exercise; heavy developmental dynamic posture exercise; static posture exercise.

31st to 40th year—same as for 17th to 30th year, only with a slight modification, if necessary, according to individual condition of health, etc.

41st to 50th year—same as 31st to 40th year, only with a slight modification, if necessary. Long walking.

51st to 60th year—all constitutional exercises (may be modified, if necessary); light and medium developmental dynamic posture exercise; static posture exercise; breath-control exercise; long walking.

61st year and up—the amount and form of exercise should be entirely governed by the condition of the muscles, internal organs and general health. If the body is maintained in perfect health by previous right habits of living, developmental and constitutional exercise, static exercise and breath-control exercise should be continued, perhaps with modified doses. Long walking is specially beneficial.

Exercise for Females

Alluring feminine beauty cannot be artificially made. Beauty cannot be expressed in a pimpled face, wrinkled eyes and an emaciated or corpulent body. Soap, cream, powder, rouge and garments cannot hide an underdeveloped and unbeauteous body. Feminine beauty lies in facial beauty combined with a symmetrically developed body. The attainment of a certain size of muscles together with a certain amount of fat giving the body beautiful shape, contour and curves and vigorous health are indispensable factors of beauty. Exercise in combination with right diet, internal cleanliness and other health-building measures are factors of health and efficiency as well as of beauty.

Dynamic posture exercise, both for health-building and developmental purposes, are equally applicable to females, to some extent in modified forms. These modifications, of course, depend upon individual constitution, strength, age, requirements, etc. Static posture exercise is quite suitable for females. Breath-control exercise should be prescribed. Even Abdomino-retraction Act and Straight-muscle Act have proved to be very beneficial. Generally all forms of constitutional exercise, slightly modified, can be prescribed. Walking, swimming and dancing should be a part of the female exercise programme.

Exercise during Menstruation

Exercise is generally omitted during menstruation. There are, of course, many healthy women who do not find any difficulty in continuing exercise during this time. However, it is best to stop heavy developmental posture exercise, inverse body posture exercise, balance posture exercise, Abdomino-retraction Act and Straight-muscle Act.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Breath-control exercise and folded-legged postures, walking and other milder forms of constitutional exercise can be practised.

In cases of profuse menstruation, exercise should be stopped. Proper exercise should be taken between periods. Swimming should be avoided.

Baths

In the morning a brief cold bath is very healthful, taken either before or after the morning exercise. After heavy exercise in the evening, a cold bath should be taken. After vigorous exercise, it is better to rest for a few minutes to give the heart and lungs an opportunity to return to their normal condition. It is best to rinse off perspiration first with a warm shower-bath to be followed by a cold shower or cold bath with vigorous friction with the hands. After the bath one can dress without drying oneself, if the reactive power is good. Otherwise the body should be dried with a dry, coarse towel to be finished with dry friction bath, and thereafter one can dress. Then drink a glass or two of cold water and take rest.

A warm bath, followed by a cold bath, should be taken once a week. A sweating bath is highly beneficial if taken periodically. The sweating bath should always be followed by a cold bath. A warm or neutral immersion bath taken once or twice a week is excellent. It helps relaxation, equalizes circulation and removes stiffness of the muscles and joints.

Sun bath should be regularly taken. It promotes muscular growth, improves the muscle tone and makes the muscles firm. Very satisfactory results are obtained if some constitutional exercise is combined with air and sun baths. Air bath and dry friction should be taken daily.

Mental Factor

A proper mental attitude is absolutely necessary for maintaining perfect health and a high degree of efficiency. Bad mental states lower the vitality, interfere with the normal functions of the vital organs, lower the disease-resisting power and decrease the nerve power.

Cultivate a hopeful, cheerful and calm attitude of mind. Have self-reliance, determination, courage and patience. Sweeten the emotional life by carefully managing the normal and right expression of emotion. Spiritual awakening will help you the most in brightening emotion, and in attaining a greater, nobler, grander, clearer and purer mind and a better, stronger, healthier, cleaner and fresher body. Fear, depression, worry, sorrow and other morbid conditions can best be controlled by spiritual strength combined with the normalization of the body.

Do not allow your mind to stagnate, for it stops the creation of mental energy. Try to develop the power of clear and deep thinking. The practice of concentration and breath-control exercise will help you most.

Relaxation

Conscious relaxation is a state in which the mind becomes free from desires, agitations and thoughts and the body still. It is not sleep, but a mental and physical inactive state brought about consciously. On the mental side, relaxation makes the mind clear and develops thinking power, concentration and greater power of control over the mind. On the physical side, it prevents unnecessary and excessive expenditure of energy and nervous and muscular tensions. If it is practised during exercise, it helps to delay the onset of fatigue and oxygen debt. It removes the tired feeling and gives freshness to body and mind when practised after exercise.

Though relaxation is a condition in which all efforts cease and mind becomes fully calm and body motionless, certain conscious effort applied in a definite manner is to be made at the preliminary stages to make the mind and the body dead-like. First of all, assume a most comfortable position. Corpse Posture is the best posture for relaxation. Now try to make the whole body dead-like by withdrawing the flow of consciousness from the body as much as possible, keeping it absolutely motionless. Then try to make the mind dead by thinking no thoughts, making it more and more void. By systematic practice success will be attained.

Relaxation should also be practised in Prone-lying Posture, Standing Posture and all folded-legged postures. Brief relaxation should be practised between exercises. Prolonged relaxation should be practised in Corpse Posture after completion of the exercise. It is highly beneficial to practise relaxation after any prolonged physical or mental work, any time in the day if so desired and on retiring.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter VI

Dynamic Application of Posture Exercise

THE development value of dynamic posture exercise depends entirely upon the principle of graduation. It operates in two ways: gradually increasing degree of muscular contraction and gradually increasing number of repetition.

Graduated Contraction Method

The secret of muscular development lies in the execution of movements in a manner that requires powerful contraction of the muscles in which a larger number of muscle cells are employed. At the first stage the strength of the muscle cells is very small. Therefore, at this stage light form of movements is enough to stimulate the muscles adequately and develop their size and strength. But as gradually the muscles become stronger, the light exercise becomes insufficient to stimulate and employ a sufficient number of the muscle fibres in the movement. At this stage exercise should be heavy enough to cause a greater number of fibres to be employed in muscles during contraction.

The repetition of light exercise many times will not serve the purpose. Before the stimuli spread over the other inactive fibres, the fibres which had been previously employed will be fatigued and compelled to move under this unfavourable condition, causing depletion of their store of potential energy. Moreover, light exercise, after a certain point, does not create a demand for greater contraction which is associated with muscular development. The most favourable condition for proper muscular development is created when most of the fibres of the muscles are involved during contraction and a maximum blood supply to the contracted muscles is caused. This can only be done by the application of a graduated contraction method.

In Yoga neither an instrument (as in weight-lifting) nor the strength and weight of another person (as in wrestling) are used in exercise to apply resistance to the muscles in a graduated manner. Here two methods have been adopted: voluntary full contraction method and posture-contraction method. In voluntary full contraction method, a voluntary effort is made to contract the muscles under movement as fully as possible, the movement being executed in positions most favourable for full contraction. This type of exercise is included in contraction exercise.

Posture-contraction method consists of assuming different postures, stage by stage, in which the muscles undergo contraction in a graduated manner, from light to heavy. When voluntary full contraction and posture-contraction are properly combined in exercise, the most satisfactory results are obtained.

Posture-contraction

For the proper development of muscles posture exercise has been evolved and the exercises are so systematically arranged as to cause contraction of a particular group of muscles in a graduated manner. Each posture exercise is so devised as to cause a desired degree of contraction.

For the sake of our convenience, we may divide contraction into three grades: light contraction, medium contraction and great contraction. In light contraction comparatively a smaller number of fibres in a muscle are brought into play. In medium contraction a large number of fibres are involved, whereas in great contraction most of the fibres take part in the exercise. Certain posture exercises cause light contraction, certain others medium contraction, while the rest cause great contraction. Therefore posture exercises may be labelled as light contraction posture exercise,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

medium contraction posture exercise and great contraction posture exercise.

When the muscles are not rightly exercised and their strength is at a low level, light contraction posture exercise will successfully train and strengthen the inefficient and inactive muscle cells and a certain stage of development will be reached. In fact, at this stage, light contraction posture exercise is to be applied for their improvement, the medium and great contraction posture exercises being unsuitable. After the initial development is attained, light contraction posture exercise becomes inadequate to stimulate the muscle properly and cause a sufficient number of muscle cells to be employed in the movement. Therefore, this light exercise fails to create a greater demand in the muscles for their greater development. At this stage medium contraction posture exercise is indicated. Again a stage of development will be reached when the great contraction posture exercise is to be applied for still further development. The arrangement of the posture exercises in a graduated manner causing, stage by stage, light, medium and finally great contraction in the muscles is the main point in dynamic posture exercise.

Repetition Factor

The gradually increasing number of repetition of movements is also an essential part of the principle of graduation. Any grade of contracting posture exercise cannot be fruitful if it is not repeated in a definite and graduated manner. For our convenience's sake, the repetition factor may be divided into low repetition, medium repetition, high repetition and very high repetition. The usual range of low repetition is from 5 to 12 times, of medium repetition from 6 to 18 times, of high repetition from 10 to 30 and of very high repetition from 24 to 50 times.

The number of repetition also depends upon the grades of exercise. Light contraction posture exercise requires high repetition, medium contraction posture exercise requires medium repetition, and great contraction posture exercise requires low repetition. On the other hand, if it is necessary to make the exercise heavy enough to bring about the desired results, high repetition may be applied for medium contraction posture exercise and medium repetition for great contraction posture exercise. Great contraction posture exercise becomes very heavy when high repetition is applied. In certain exercises and in exceptional cases very high repetition is necessary.

The number of movements, from the starting to the maximum number, should be increased in a definite order. The following order is usually adopted:

LOW REPETITION WORK TABLE

1st week	5
2nd to 7th week increase with 1 every week	
8th week	12

Remark: Sometimes it may be necessary to continue with the same number of movements for two weeks instead of one. It depends upon individual constitution, strength, endurance, age, sex, etc. It may also be necessary to modify the number in certain cases.

MEDIUM REPETITION WORK TABLE

Order A

1st week	6
2nd to 6th week increase with 2 every week	
7th week	18

Order B

1st week	6
2nd to 12th week increase with 1 every week	
13th week	18

Remark: Order A is for stronger students. However, a certain number of repetitions can be maintained longer than what is indicated in the table, if required. Everything depends upon the constitution, strength, endurance, age, sex, etc., of the students. It may also be necessary to alter the number in each order in certain cases.

HIGH REPETITION WORK TABLE

Order A

1st week	10
2nd to 10th week increase with 2 every week	
11th week	30

Order B

1st week	10
2nd to 20th week increase with 1 every week	
21st week	30

Remark: Same as in Medium Repetition Work Table.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

VERY HIGH REPETITION WORK TABLE

Order A

1st week 24
2nd to 13th week increase with 2 every week
14th week 50

Order B

1st week 24
2nd to 26th week increase with 1 every week
27th week 50

Remark: As in Medium Repetition Work Table.

Dynamic Posterior Trunk-bend Posture Exercise

Posterior trunk-bend posture exercise like other exercise is classified into light contraction posterior trunk-bend posture exercise, medium contraction posterior trunk-bend posture exercise and great contraction posterior trunk-bend posture exercise. These exercises are grouped as follows:

Light Contraction Exercise:
- Serpent Posture.
- Modified Locust Posture.
- Cuckoo Posture.

Medium Contraction Exercise:
- Snake Posture.
- Locust Posture.
- Back-raise Posture with hands clasped behind head.
- Bow Posture.
- Boat Posture.
- Swing Posture.
- Raised Bow Posture.
- Modified Wheel Posture.

Great Contraction Exercise:
- Back-raise Posture with forearms locked behind head.
- Bent-head Adamantine Posture.
- Serpent-king Posture.
- Back Posture.
- Wheel Posture.

Repetition:

For Light Contraction Exercise, Medium Contraction Exercise and Great Contraction Exercise:

1st Stage . . Low Repetition
2nd Stage . . Medium Repetition
3rd Stage . . High Repetition

This applies to all posture exercises which follow.

Gradation of Exercise:

Exercise may be graded stage by stage according to the following plan:

No. 1. Serpent Posture ⟶ Cuckoo Posture ⟶ Snake Posture ⟶ Back-raise Posture with hands clasped behind head ⟶ Back-raise Posture with forearms locked behind head ⟶ Serpent-king Posture.

No. 2. Modified Locust Posture ⟶ Locust Posture ⟶ Bow Posture ⟶ Raised Bow Posture ⟶ Boat Posture ⟶ Swing Posture ⟶ Serpent-king Posture.

No. 3. Raised Bow Posture ⟶ Modified Wheel Posture ⟶ Bent-head Adamantine Posture ⟶ Back Posture ⟶ Wheel Posture.

Remark: The mark ⟶ indicates that the exercise next to this requires greater contraction or flexibility than the previous one. Even the exercises of the same contraction type may be different and graded. This applies to all other exercises.

Dynamic Anterior Trunk-bend Posture Exercise

Light Contraction Exercise:
- Back-stretch Posture.
- Head-knee Posture.
- Foot-hand Posture.

Medium Contraction Exercise:
- Head-bend Lotus Posture.
- Forward Head-bend Posture.

Great Contraction Exercise:
- Head-bend Posture.
- Forward Body-bend Posture.

Gradation of Exercise:

Back-stretch Posture ⟶ Foot-hand Posture ⟶ Head-knee Posture ⟶ Head-bend Lotus Posture ⟶ Forward Head-bend Posture ⟶ Head-bend Posture ⟶ Forward Body-bend Posture.

Dynamic Lateral Trunk-bend Posture Exercise

Light Contraction Exercise:
- Semilunar Posture.

Medium Contraction Exercise:
- Hip-bend Posture.

Great Contraction Exercise:
- Moon Posture.

Gradation of Exercise:

Semilunar Posture ⟶ Hip-bend Posture ⟶ Moon Posture.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Dynamic Trunk-twist Posture Exercise

Light Contraction Exercise:
Twist Posture.
Medium Contraction Exercise:
Modified Spine-twist Posture.
Ankle-hold Modified Spine-twist Posture.
Great Contraction Exercise:
Spine-twist Posture.
Sideward Head-bend Posture.
Gradation of Exercise:
Twist Posture ⟶ Modified Spine-twist Posture ⟶ Ankle-hold Modified Spine-twist Posture ⟶ Sideward Head-bend Posture ⟶ Spine-twist Posture.

Dynamic Neck Posture Exercise

Light Contraction Exercise:
Neck Flexion-extension.
Neck Rotation.
Lateral Neck Flexion.
Medium Contraction Exercise:
Neck Posture.
Great Contraction Exercise:
Neck-bridge Posture.
Gradation of Exercise:
Neck Flexion-extension + Neck Rotation + Lateral Neck Flexion ⟶ Neck Posture ⟶ Neck-bridge Posture.

Remark: The + mark indicates no gradation. It simply indicates that the three exercises are of the same contraction type but each of them is intended either to exercise the neck muscles in different manners or to exercise different muscles brought into play. This applies to all other exercises.

Dynamic Anterior Trunk-raise Posture Exercise

Light Contraction Exercise:
Spine Posture.
Medium Contraction Exercise:
Spine Posture with hands clasped behind head.
Great Contraction Exercise:
Spine Posture with forearms locked behind head.
Risen Balance Posture.
Gradation of Exercise:
Spine Posture ⟶ Spine Posture with hands clasped behind head ⟶ Spine Posture with forearms locked behind head ⟶ Risen Balance Posture.

Dynamic Oblique Trunk-raise Posture Exercise

Light Contraction Exercise:
Oblique Spine Posture.
Medium Contraction Exercise:
Oblique Spine Posture with hands clasped behind head.
Great Contraction Exercise:
Oblique Spine Posture with forearms locked behind head.
Gradation of Exercise:
Oblique Spine Posture ⟶ Oblique Spine Posture with hands clasped behind head ⟶ Oblique Spine Posture with forearms locked behind head.

Dynamic Lateral Trunk-raise Posture Exercise

Light Contraction Exercise:
Lateral Spine Posture when performed with legs supported and raised only partially.
Medium Contraction Exercise:
Lateral Spine Posture when performed with legs supported.
Great Contraction Exercise:
Lateral Spine Posture.
Gradation of Exercise:
Lateral Spine Posture (with legs supported and raised partially) ⟶ Lateral Spine Posture (with legs supported) ⟶ Lateral Spine Posture.

Dynamic Pelvis-raise Posture Exercise

Light Contraction Exercise:
Plough Posture.
Ear-pressing Posture.
Medium Contraction Exercise:
Plough Posture with forearms locked behind head.
Great Contraction Exercise:
Risen Back Posture.
Bent-knee Back Posture.
Gradation of Exercise:
Plough Posture + Ear-pressing Posture ⟶ Plough Posture with forearms locked behind head ⟶ Risen Back Posture ⟶ Bent-knee Back Posture.

Dynamic Leg-raise Posture Exercise

Light Contraction Exercise:
Single Risen Leg Posture.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Medium Contraction Exercise:
Sideward Leg-motion Posture.
Bent-leg Posture.
Great Contraction Exercise:
Risen Leg Posture.
Gradation of Exercise:
Single Risen Leg Posture ⟶ Sideward Leg-motion Posture ⟶ Bent-leg Posture ⟶ Risen Leg Posture.

Dynamic Anterior Trunk-leg-raise Posture Exercise

Light Contraction Exercise:
Head-knee Spine Posture.
Medium Contraction Exercise:
Knee-touching Spine Posture.
Great Contraction Exercise:
Pillow Posture.
Gradation of Exercise:
Head-knee Spine Posture ⟶ Knee-touching Spine Posture ⟶ Pillow Posture.

Dynamic Lateral Trunk-leg-raise Posture Exercise

Light Contraction Exercise:
Toe-hold Lateral Spine Posture, performed with the support of the disengaged arm and raised only partially.
Medium Contraction Exercise:
Toe-hold Lateral Spine Posture, performed with the partial support of the disengaged arm and raised fully.
Great Contraction Exercise:
Toe-hold Lateral Spine Posture.
Gradation of Exercise:
Toe-hold Lateral Spine Posture (with full arm support and raised partially) ⟶ Toe-hold Lateral Spine Posture (with partial arm support and raised fully) ⟶ Toe-hold Lateral Spine Posture.

Abdomino-retraction Act (Uḍḍīyāna)

There are two repetition methods for Abdomino-retraction Act. One is to maintain the abdominal retraction as long as the breath is suspended. Then the abdomen is to be relaxed and inspiration should be made. The abdominal retraction should again be done. In this way it should be repeated.

The second method consists of performing the retraction movement from 5 to 10 times (or more) in one suspension of breath. This is one round. Each retraction should be executed quickly, but should be complete. In this work the second method has been adopted.

REPETITION METHOD

1st week:	2 rounds	(10 in each round)	=	20 times
2nd ,, :	4 ,,	,,	,,	= 40 ,,
3rd ,, :	6 ,,	,,	,,	= 60 ,,
4th ,, :	8 ,,	,,	,,	= 80 ,,
5th ,, :	10 ,,	,,	,,	= 100 ,,

Remark: Maintain 100 times until it becomes quite easy. Then gradually increase—one round a week or in two weeks or more, depending upon the condition—until 500 times are reached.

Straight-muscle Act (Naulī)

The following is the repetition method:

Section 1:

Central Isolation

1st week	10 times
2nd ,, ...	20 ,,
3rd ,, ...	30 ,,
4th ,, ...	40 ,,
5th ,, ...	50 ,,
6th ,, ...	60 ,,
7th ,, ...	70 ,,
8th ,, ...	80 ,,
9th ,, ...	90 ,,
10th ,, ...	100 ,,

Section 2:

	Central	*Right*	*Left*
1st week . . .	100	10	10
2nd ,, . . .	110	15	15
3rd ,, . . .	120	20	20
4th ,, . . .	130	25	25
5th ,, . . .	140	30	30
6th ,, . . .	150	35	35
7th ,, . . .	160	40	40
8th ,, . . .	170	45	45
9th ,, . . .	180	50	50
10th ,, . . .	190	50	50
11th ,, . . .	200	50	50

Remark: The number of repetitions may be modified according to the condition of the student.

Section 3:

	Central	*Right*	*Left*	*Right-left turn*
1st week . .	200	50	50	5
2nd ,, . .	210	55	55	5

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

	Central	Right	Left	Right-left turn
3rd week . .	210	55	55	10
4th „ . .	220	60	60	10
5th „ . .	220	60	60	15
6th „ . .	230	65	65	15
7th „ . .	230	65	65	20
8th „ . .	240	70	70	20
9th „ . .	240	70	70	25
10th „ . .	250	75	75	25

Remark: The number of repetitions may be modified according to the condition of the student.

Section 4:

	Central	Right	Left	Right-left turn	Rolling
1st week . .	250	75	75	25	5
2nd „ . .	—	—	—	30	5
3rd „ . .	—	—	—	30	10
4th „ . .	—	—	—	35	10
5th „ . .	—	—	—	35	15
6th „ . .	—	—	—	40	15
7th „ . .	—	—	—	40	20
8th „ . .	—	—	—	45	20
9th „ . .	—	—	—	45	25
10th „ . .	—	—	—	50	25

Remark: The number of repetitions may be modified according to the condition of the student. If it is desired and suitable the number of repetitions on the central, right and left isolations can be increased.

Dynamic Pelvic Posture Exercise

Light Contraction Exercise:
- Pelvis-raise Posture.
- Arm-head Posture.

Medium Contraction Exercise:
- Single Foot-head Posture.
- Single Foot-head Head-knee Posture.

Great Contraction Exercise:
- One-leg Pillar Posture.
- Pillar Posture.
- Double Foot-head Posture.
- Noose Posture.

Gradation of Exercise:

Pelvis-raise Posture ⟶ Arm-head Posture ⟶ Single Foot-head Posture ⟶ Single Foot-head Head-knee Posture ⟶ Double Foot-head Posture ⟶ Noose Posture supplemented by One-leg Pillar Posture ⟶ Pillar Posture.

Anal Act

The following is the repetition method:

Commence with 25 times. Then increase 25 times each week until you reach 500 times.

Dynamic Pectoral Limb Posture Exercise

Light Contraction Exercise:
- Risen Lotus Posture.
- Quadruped Posture.
- Arm Motion.

Medium Contraction Exercise:
- Cock Posture.
- Three-footed Posture.

Great Contraction Exercise:
- One-arm Cock Posture.
- Arm-leg Posture.
- Opposite Arm-leg Posture.
- Arm Posture.

Gradation of Exercise:

No. 1.

Risen Lotus Posture ⟶ Cock Posture ⟶ One-arm Cock Posture.

No. 2.

Quadruped Posture + Arm Motion ⟶ Three-footed Posture ⟶ Arm-leg Posture ⟶ Opposite Arm-leg Posture ⟶ Arm Posture.

Dynamic Pelvic Limb Posture Exercise

Light Contraction Exercise:
- Toe Posture.
- Thigh Posture.
- Knee-touching Thigh Posture.

Medium Contraction Exercise:
- Feet-extending Thigh Posture.
- Sideward Feet-extending Thigh Posture.

Great Contraction Exercise:
- One-legged Toe Posture.
- Leg-raise Thigh Posture.
- One-legged Squat Posture.

Gradation of Exercise:

No. 1.

Toe Posture ⟶ One-legged Toe Posture.

No. 2.

Thigh Posture ⟶ Knee-touching Thigh Posture ⟶ Feet-extending Thigh Posture + Sideward Feet-extending Thigh Posture ⟶ Leg-raise Thigh Posture ⟶ One-legged Squat Posture.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter VII

Static Application of Posture Exercise

THE main feature of posture exercise when utilized statically is to maintain the final attitude for a certain time limit. This time limit is not constant. The maintenance of a posture should be gradually increased in a definite manner from low to the high time limit. The effectiveness of the static posture exercise depends upon the time factor.

Each posture should be first perfected and controlled by its systematic dynamic use. Only a perfected and well-controlled posture is utilizable as a static exercise.

In the static form of exercise the whole body which is in a particular attitude should remain absolutely motionless. This physical motionlessness, apart from its great health value, has far-reaching effects. It is essentially connected with the development of the concentration of the mind. As different posture exercises are intended to exercise the body and all its parts in different manners, so the physical motionlessness attained in different postures influences the mind in different ways favouring deep concentration. One who is able to concentrate in different postures gains sufficient power of control over the mind. But whatever posture is adopted for the purpose, physical motionlessness should be attained in that posture, otherwise the body will not be at all suitable for concentration.

If the posture is neither perfect nor controlled, motionlessness in that posture cannot be attained. The ease stage of a posture is inseparably connected with the physical motionlessness. As soon as the final attitude is assumed, the body will be perfectly motionless, if the posture is perfected and controlled, and immediately the ease stage will follow. This is the stage most suitable for mental relaxation and concentration. The duration of the ease stage should be gradually increased.

Ease stage goes into the discomfort stage when discomfort begins to appear. By regular practice the ease stage is gradually prolonged. Usually the posture is discontinued at the onset of discomfort. The discomfort stage may be subdivided into four phases: discomfort phase, endurance phase, will-power phase and intolerance phase. When discomfort becomes turned into pain, it is called pain or endurance phase. If the posture is continued up to this point, the power of toleration of pain is increased and along with it vital endurance is increased. As a result natural health and natural immunity are established in the body. The endurance phase should be very carefully and gradually lengthened. However, when pain becomes intense, the will-power phase is reached. In bearing the intense pain calmly with the body maintained motionless, will-power is called into play and developed to a high level. The will-power phase also should be increased in a systematic manner. At a certain point the intense pain becomes intolerable. At this phase the posture must be discontinued.

Maintaining-time

Maintaining-time is the period of time of maintaining a static posture. Suitable postures should be selected for static exercise. The static aspect of the posture in relation to maintaining-time may be divided into ease stage, endurance phase and will-power phase. According to the type of exercise, the duration of time is regulated. The increase of maintaining-time should be done in a graduated manner and should be adjusted according to the general physical condition, strength, endurance, age, sex, etc., of the pupils.

The approximate starting time in ease stage is

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the period of time during which the posture can be maintained with ease, i.e. without the feeling of discomfort. The time varies according to the type and the perfection and control achieved by the training of the posture. As a rule, when the posture is perfected and controlled by dynamic exercise, the ease stage becomes longer. The scale of increase of maintaining time of the ease stage may be divided into four categories: low, medium, high and very high. In the low scale, the time is increased by half a minute at a time until the maximum of 6 minutes is reached. In the medium scale, the time is increased by 1 minute or ½ minute at a time until the maximum of 15 minutes is reached. In the high scale, the time is increased by 1 or 2 minutes at a time until the maximum of 30 minutes is reached. In the very high scale, the time is increased by 3, 4 or 5 minutes at a time until the maximum of an hour, or even more, is reached. Time tables follow:

LOW MAINTAINING-TIME TABLE (EASE STAGE)

Order A

1st week . . . . . 1 minute
2nd to 10th week increase ½ minute every week
11th week . . . . . 6 minutes

Order B

1st week . . . . . 1 minute
2nd to 20th week increase ½ minute every second week
21st week . . . . . 6 minutes

Remark: According to the capacity of the student Order A or B can be adopted. Order A is for the student endowed with greater strength and endurance. The scale of increase and the intervals may be modified according to the general physical condition, strength, endurance, age, sex and individual requirements of the student.

MEDIUM MAINTAINING-TIME TABLE (EASE STAGE)

Order A

1st week . . . . . 6 minutes
2nd to 9th week increase 1 minute every week
10th week . . . . . 15 minutes

Order B

1st week . . . . . 6 minutes
2nd to 18th week increase ½ minute every week
19th week . . . . . 15 minutes

Order C

1st week . . . . . 6 minutes
2nd to 18th week increase 1 minute every second week
19th week . . . . . 15 minutes

Order D

1st week . . . . . 6 minutes
2nd to 36th week increase ½ minute every second week
37th week . . . . . 15 minutes

Remark: According to the general physical condition, strength, endurance, previous training, age, sex and individual requirements, any of the above tables may be adopted. It may also be necessary to modify the scale of increase in certain cases.

HIGH MAINTAINING-TIME TABLE (EASE STAGE)

Order A

1st week . . . . . 15 minutes
2nd to 8th week increase 2 minutes every week
9th week . . . . . 30 minutes

Order B

1st week . . . . . 15 minutes
2nd to 16th week increase 2 minutes every second week
17th week . . . . . 30 minutes

Order C

1st week . . . . . 15 minutes
2nd to 15th week increase 1 minute every week
16th week . . . . . 30 minutes

Order D

1st week . . . . . 15 minutes
2nd to 30th week increase 1 minute every second week
31st week . . . . . 30 minutes

Remark: One who is able to maintain a posture for 15 minutes is qualified for the high maintaining work. Generally speaking, the general physical condition, strength, endurance, previous training, age, sex and individual requirements will determine which of the four orders is to be adopted.

It is not necessary to give any time table for very high maintaining-time. The increase is by 3, 4 or 5 minutes at a time until the maximum is reached. Only an advanced student can adopt this measure.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Endurance and Will-power Phases

The duration of time of the endurance phase should be very slowly increased. The usual scale of increase at a time is from 10 to 20 seconds at intervals of 1 to 4 weeks. The usual maximum maintaining-time is 10 minutes. In exceptional cases, it may go beyond 10 minutes.

When the endurance phase is carried to a point when intense pain is experienced, it is called the will-power phase. The duration of time of the will-power phase should also be very slowly and carefully increased. The usual scale of increase at a time is from 5 to 10 seconds at intervals of 1 to 4 weeks. The maximum maintaining-time is 5 minutes. In exceptional cases, it may go beyond that.

PRACTICAL APPLICATION

The name of each exercise together with the suitable maintaining-time is given in the following:

Static Posterior Trunk-bend Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Serpent Posture	Low
Cuckoo Posture	,,
Medium Contraction Exercise:	
Snake Posture	,,
Locust Posture	,,
Back-raise Posture with hands clasped behind head	,,
Bow Posture	,,
Boat Posture	,,
Swing Posture	,,
Raised Bow Posture	,,
Great Contraction Exercise:	
Back-raise Posture with forearms locked behind head	,,
Serpent-king Posture	,,
Wheel Posture	,,

Static Anterior Trunk-bend Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Back-stretch Posture	Low
Head-knee Posture	,,
Foot-head Posture	,,
Medium Contraction Exercise:	
Head-bend Lotus Posture	Low
Forward Head-bend Posture	,,
Great Contraction Exercise:	
Head-bend Posture	,,
Forward Body-bend Posture	,,

Static Lateral Trunk-bend Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Semilunar Posture	Low
Medium Contraction Exercise:	
Hip-bend Posture	,,
Great Contraction Exercise:	
Moon Posture	,,

Static Trunk-twist Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Twist Posture	Low
Medium Contraction Exercise:	
Modified Spine-twist Posture	,,
Ankle-hold Modified Spine-twist Posture	,,
Great Contraction Exercise:	
Spine-twist Posture	,,
Sideward Head-bend Posture	,,

Supplementary Static Spinal Posture Exercise

Name of exercise	*Maintaining-time*
Fish Posture	Low and Medium

Static Neck Posture Exercise

Name of exercise	*Maintaining-time*
Neck-bridge Posture	Low

Supplementary Static Neck Posture Exercise

Name of exercise	*Maintaining-time*
Chin-lock Act	Low and Medium

Remark: Chin-lock Act is the most important static neck exercise and is utilized in Breath-control Exercise. After Chin-lock Act static Fish

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Posture should be practised to stretch the neck muscles. Static neck rotation is effected by Modified Spine-twist Posture, Ankle-hold Modified Spine-twist Posture and Spine-twist Posture. Therefore, the right combination of all these exercises is necessary for the static exercise of the neck.

Static Anterior Trunk-raise Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Spine Posture	Low
Medium Contraction Exercise:	
Spine Posture with hands clasped behind head	,,
Great Contraction Exercise:	
Spine Posture with forearms locked behind head	,,

Static Pelvis-raise Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Plough Posture	Low and Medium
Ear-pressing Posture	Low
Medium Contraction Exercise:	
Plough Posture with forearms locked behind head	,,
Great Contraction Exercise:	
Risen Back Posture	,,
Bent-knee Back Posture	,,

Static Anterior Trunk-leg-raise Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Head-knee Spine Posture	Low
Medium Contracting Exercise:	
Knee-touching Spine Posture	,,
Great Contraction Exercise:	
Pillow Posture	,,

Static Lateral Trunk-leg-raise Posture Exercise

Name of exercise	*Maintaining-time*
Great Contraction Exercise:	
Toe-hold Lateral Spine Posture	Low

Supplementary Static Abdominal Posture Exercise

Name of exercise	*Maintaining-time*
Bent-knee Inverse Lotus Posture	Low

Static Pelvic Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Pelvis-raise Posture	Low
Arm-head Posture	,,
Medium Contraction Exercise:	
Single Foot-head Posture	,,
Single Foot-head Head-knee Posture	,,
Great Contraction Exercise:	
One-leg Pillar Posture	,,
Pillar Posture	,,
Double Foot-head Posture	,,
Noose Posture	,,

Supplementary Static Pelvic Posture Exercise

Name of exercise	*Maintaining-time*
Happy Posture	Low
Sideward Leg-stretch Posture	,,
Backward-forward Leg-stretch Posture	,,

Static Pelvic Control Exercise

Name of exercise	*Maintaining-time*
Anal-lock Act	Low

Remark: Anal-lock Act may be repeated from 3 to 12 times in one sitting.

Static Pectoral Limb Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Risen Lotus Posture	Low
Quadruped Posture	,,
Medium Contraction Exercise:	
Cock Posture	,,
Great Contraction Exercise:	
One-arm Cock Posture	,,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Static Pelvic Limb Posture Exercise

Name of exercise	*Maintaining-time*
Light Contraction Exercise:	
Toe Posture	Low
Knee-touching Thigh Posture	,,
Medium Contraction Exercise:	
Feet-extending Thigh Posture	,,
Sideward Feet-extending Thigh Posture	,,
Great Contraction Exercise:	
One-legged Toe Posture	,,
Leg-raise Thigh Posture	,,

Static Inverse Body Posture Exercise

Name of exercise	*Maintaining-time*
Inverse Act	Low, Medium and High
Shoulder Posture	Low
Head Posture	Low, Medium, High and Very High
Inverse Lotus Posture	Low and Medium

Static Balance Posture Exercise

Name of exercise	*Maintaining-time*
Eagle Posture	Low
Standing Head-knee Posture	,,
Wing Posture	,,
Bent-head Wing Posture	,,
Knee-heel Posture	,,
Standing Single Foot-head Posture	,,
Standing Leg-stretch Posture	,,
Mountain Posture	,,
Peacock Posture	,,
Crab Posture	,,
Rolling Posture	,,
Arm-stand Posture	,,
Modified Scorpion Posture	,,
Scorpion Posture	,,

Folded-legged Postures

Name of exercise	*Maintaining-time*
Accomplished Posture	Low, Medium, High and Very High
Lotus Posture	Low, Medium, High and Very High
Pleasant Posture	Low, Medium, High and Very High
Toe-hold Lotus Posture	Low and Medium

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter VIII

Diet

DIET plays a most important rôle through the supply of certain elements which must come from the outside to the system for maintaining its structure and functions upon which depends to a very great extent the state of physical and mental life of man. Diet exercises its influence in a general as well as specific manner. In a general way, it maintains the forms and structure of the tissues and their functional efficiency by supplying elements which are utilized for the construction and repair and the production of heat and energy. When there is a lack of one or more such substances, a disturbance takes place in the system. These elements are contained in what we call food.

The character of the tissues is mostly determined by the character of food taken habitually. In the selection of food, established dietetic habits, environmental condition, country, muscular activities, individual liking, education, ideals—all are involved. The physical and mental standards of man depend on the selection of food.

The specific power of the organism operating in relation to the digestion and absorption of food is a check against allowing certain substances to pass into the blood. This specific selective power contributes to the building of a specific constitution of the body with which is related the individual specificity of the mind. When the selection of food is done in conformity with this inner selective principle and a balance is established between the alimentary and eliminative processes of the body, a most suitable condition for physical and mental health and growth is created.

The state of health depends on the supply of the various elements needed by the body from the outer world in right proportion and in right combination. When there is a deficiency or complete absence of one or more of these elements, and an over-supply of one or more elements or all elements, the balance between alimentation and elimination is disturbed, health is impaired, the vital vigour is decreased, the functional efficiency of the body is lowered and normal growth is affected. Two factors are most important in this connection: selection of right food in the right amount and the digestive power.

In selecting food, long-standing dietetic habits should be carefully considered. The effects of a certain mode of alimentation are both immediate and far-reaching. The dietetic influence on bodily growth and strength is observable within a short period of time. But its influence in giving the body and the mind a characteristic shape—a speciality—cannot be noticeable within a few years. It may not even be well marked during the lifetime of an individual. But it will be fully manifested in his descendants. He himself is the product of his ancestral dietetic habits. The real improvement of man lies more in this specific moulding of his body and mind through diet than in increased size and strength of the body. It is, therefore, not wise to make a radical change in the ancestral mode of diet without considering many factors.

The earliest diet of man seems to be mainly based on plants. It comprised leaves, shoots, roots, flowers and fruits. It was essentially a vegetable and fruit diet. At the next stage meat and fish were added. Man lived on this mixed diet for hundreds of thousands of years. Then milk and eggs were added to this diet of vegetables, fruits and meat with the domestication of animals. Finally, cereals and pulses were added to his previous diet with the introduction of agriculture. This is considered to be the general order.

But it is not to be supposed that the whole

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

human race followed this order of diet uniformly and at the same time. The relative proportion of meat, milk, fruits, vegetables and grains depended on the flora and fauna of a particular region, the fertility of the land, stage of culture, type of life, opportunity, racial, class and individual characteristics, religious belief and so forth. On the whole, the human dietetic habits took three main forms: mixed diet, lacto-vegetarian diet and meat diet. The greater part of the human race has adopted the mixed diet consisting of fruits, vegetables, grains, milk and meat. In the lacto-vegetarian diet meat has been discarded. In the meat diet meat is the main item of aliment.

Yogic Diet

In Yoga the lacto-vegetarian diet has been mainly adopted. The Yogic diet is based on the principle of maintaining a perfect balance between alimentation and elimination upon which the natural health of the body depends so much and also the power of concentration. It is most suitable for maintaining the normal nutritional level of the body, gastro-intestinal efficiency, normal colonic activity and cleanliness and general increased elimination. The Yogins found that a diet consisting of fruits, vegetables and milk is well fitted for the purpose.

It is not that meat is an unsuitable food for man. Rather it is a most ancient food of man, much older than milk. A normal human alimentary canal is equally efficient in handling meat and milk. Moreover, it has been observed that a diet with meat or with milk but without meat is equally nourishing. Meat-eating has proved more satisfactory in a condition of life in which physical exercise takes a predominating part. But to one leading a life which is characterized by decreased physical activities and increased mental activities meat does not seem to be as satisfactory as in the other case. It has been experienced that meat increases the sluggishness and bacterial unhealthfulness of the colon and the general impurification in many such cases. Furthermore, it is not considered to be very helpful in concentration. In many a case meat has been found to be unsuitable for concentration. This is one of the reasons why meat has been replaced by milk in Yogic diet.

It may also be noted in this connection that everyone is not adversely influenced by meat in concentration. At a higher stage of Yoga, diet, of course, does not play any prominent part in concentration. Both milk and meat prove to be equally good. More restriction is necessary at the elementary stages. Furthermore, persons with strong propensity for meat may find it difficult to give it up altogether all at once. When meat-eating has also been an established habit, individual as well as ancestral, it is not easy and perhaps not wise to discard it completely without carefully considering other important factors. On the other hand, if meat is foreign to an ancestral and individual diet, it would be equally unwise to adopt a meat diet because of the unfounded belief that meat has a special strength-giving value and that muscle and strength cannot be built without it, or because the Eskimos who live on meat and fish are a very healthy race.

A lacto-vegetarian diet is quite as satisfactory in promoting health, growth and strength of the body as mixed or meat diets. But in many respects it seems to be superior to both. Milk can meet all the protein needs of the body even for persons taking heavy form of muscular exercise. It has also been observed that milk is much more suitable in maintaining increased colonic activity and bacterial healthfulness of the colon. Milk, fruits and vegetables are the best laxative foods and most useful in removing constipation.

Classification of Foods

The lacto-vegetarian diet of the Yogins consists of fruits, vegetables, cereals, pulses, nuts, sugars, milk and milk products. From a practical point of view these foods can be classified as follows:

1. Acid Fruit Group.
2. Sweet Fruit Group.
3. Non-starchy Vegetable Group.
4. Starchy Vegetable Group.
5. Cereal Group.
6. Pulse Group.
7. Nut Group.
8. Milk Group.
9. Fat Group.
10. Sugar Group.

To determine correctly the nutritional value of

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

each food, each group is to be considered from the following points of view:

Carbohydrates, fats, proteins, mineral salts, vitamins, acid-alkaline balance, laxative properties of food, foods to be used raw, reducing food and weight-gaining food.

From a chemical point of view foods are classified into carbohydrates, fats, proteins, minerals and vitamins. Carbohydrates are the chief source of heat and energy for activities. They consist of simple sugars (monosaccharides), double sugars (disaccharides) and starch and cellulose (polysaccharides). The sugars and starch supply energy. The simple sugars are glucose, fructose and galactose. Disaccharides consist of cane sugar, malt sugar and milk sugar or lactose. Cellulose is not digested in the human alimentary canal. Its main function is to add to the bulk of the contents of the alimentary canal which helps the onward march of the food towards the rectum.

Fats also supply heat and energy. They are more concentrated fuel foods than carbohydrates and give about two and a quarter times more calories of heat for a given amount. However, carbohydrate is the main fuel food for muscular activities in man. The muscle will utilize it first, if it is available. But muscle is also able to utilize fat if it is in available form, especially when the carbohydrates stored in liver and muscle have been depleted by prolonged muscular exercise. It is supposed that fat becomes converted to carbohydrate before oxidation. But fat has a special value as food. It seems to supply certain essentials, not very much understood at present, which enable a person to make prolonged respiratory effort in connection with breath-control. The fat within the body is formed from fatty foods as well as carbohydrates, and also possibly from proteins.

Proteins build and repair tissues. Their value as a fuel is of minor importance. Heavy muscular exercise does not require a larger protein intake. The power of the body to utilize proteins is limited. By consuming more protein we cannot attain greater muscular growth. Excess protein is neither utilized nor stored in the body, but becomes the source of the impurification of the body and disease. Not all protein foods are equal in value. Foods containing those amino-acids which are good for both growth and maintenance are of superior type. The others are of inferior type. The nutritional value of an inferior protein is increased when combined with a superior protein. The proteins of milk, nuts, meats and eggs are of superior type. Among all the superior proteins milk is considered the best. Vegetable proteins when combined with milk or other superior protein become nutritionally more satisfactory.

The mineral salts have no fuel value but are essential to growth, functional efficiency, health and vitality of the body. They include calcium, phosphorus, potassium, sulphur, sodium, chlorine, magnesium, iron, manganese, iodine, silicon, fluorine, copper, zinc, aluminium and others. Calcium in conjunction with phosphorus and vitamin D is the most important element concerned with the development of bone and teeth. It plays an important rôle in maintaining cardiac efficiency and the capacity for physical and mental work, blood coagulation and increasing disease-resisting power. Sodium chloride is necessary for growth and vitality. Sodium is concerned in the rhythmic action of the heart. Potassium is concerned in maintaining the normal action of the heart and the normal osmotic pressure in the tissues. Sulphur plays a rôle in oxidation. Silicon is connected with the enamel of the teeth, nails and hair. Fluorine is also concerned in the enamel of the teeth. Iron is concerned with the carrying of oxygen and carbon dioxide. Copper is concerned with the formation of hemoglobin. Manganese is perhaps also concerned in the formation of hemoglobin. Iodine plays an important rôle in the normal functioning of the thyroid gland.

Minerals are also concerned in maintaining the acid-alkaline balance. Calcium, potassium, sodium, magnesium and iron are alkaline elements. Foods rich in these elements are alkaline foods. Phosphorus, sulphur, chlorine and iodine are acid elements. The normal alkalinity of the blood should be maintained by right selection of foods. Lowered alkalinity of the blood lowers the vitality and causes disease.

Vitamins are essential for health, vitality, growth and efficiency and for the prevention of specific diseases caused by their deficiency in foods. The better-known vitamins are: vitamin A, vitamin B_1, vitamin B_2 complex, vitamin C, vitamin D, vitamin E and vitamin K. Vitamin B_2 complex consists of nicotinamide (nicotinic acid), riboflavin, pyridoxin, pantothenic acid and others.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Vitamin A deficiency causes the failure of growth, night-blindness, xerosis, xerophthalmia and multiple infections. Vitamin B_1 is concerned in the carbohydrate metabolism and its deficiency causes beri-beri. The deficiency of nicotinamide causes pellagra. The deficiency of riboflavin causes cheilosis. The deficiency of pyridoxin is probably also associated with cheilosis. Much is not known about pantothenic acid. Its deficiency may be associated with "burning-feet" syndrome and some other troubles. Vitamin C is needed for a person taking heavy muscular exercise and also during pregnancy and lactation. Its deficiency causes scurvy and increased susceptibility to infection. Vitamin D is especially connected with bone growth. Its lack causes rickets. Vitamin E is associated with sexual health and efficiency, and its deficiency causes sterility in women and degeneration of the germ cells in man. The deficiency of vitamin K lowers the prothrombin content of the blood.

Laxative foods are those which promote normal bowel evacuation and prevent constipation. Foods rich in cellulose are generally laxative. But there are certain other foods which are also laxative due to their specific properties. For better health and increased vitality certain foods, especially fruits and vegetables, should be eaten raw. Certain foods are more suitable and useful when taken raw. So laxative and raw foods should be added to a well-balanced diet. Foods for weight-gaining are those which are generally of high caloric value. They should be discarded or reduced in a reducing diet. Foods having low caloric value are suitable for weight-reduction. The ten points are dealt with in a practical manner in the remark made in connection with each group of foods tabled below.

I. Acid Fruit Group

1. Āmalakas (fruit of the Emblic Myrobalan).
2. Apples.
3. Apricots.
4. Blackberries.
5. Blueberries.
6. Cantaloupes.
7. Cherries.
8. Currants.
9. Figs (fresh).
10. Gooseberries.
11. Grapes.
12. Grape-fruits.
13. Honeydew melons.
14. Lemons.
15. Lichis.
16. Limes.
17. Mangoes.
18. Musk melons.
19. Oranges.
20. Peaches.
21. Pears.
22. Persimmons.
23. Pineapples.
24. Plums.
25. Pomegranates.
26. Prunes.
27. Shaddocks.
28. Strawberries.
29. Tangerines.

Remark: Foods listed under Acid Fruit Group are in general rich in mineral salts and vitamins, antitoxic and laxative, and suitable for the purification of the body and promote vitality and health. They contain glucose and fructose.

Glucose and fructose: Specially in Nos. 8, 9, 11, 13, 17, 18, 19, 20, 21, 23, 25, 28, 29.
Calcium, magnesium, phosphorus, iron and copper: No. 11.
Vitamin C: Nos. 2, 8, 12, 14, 16, 19, 20, 23, 28.
Acid-forming: Nos. 10, 24, 26.
Alkaline: All except Nos. 10, 24 and 26.
Raw: All.
Laxative: Nos. 7, 8, 9, 11, 17, 20, 26, 28.
Reducing: Nos. 1, 2, 7, 9, 12, 14, 15, 16, 19, 23, 24, 25, 27, 29.
Weight-gaining: Nos. 11, 17.

II. Sweet Fruit Group

1. Bananas (ripe).
2. Bilva (wood-apple).
3. Dates.
4. Figs (dry).
5. Panasa (ripe Indian bread-fruit).
6. Papayas.
7. Raisins.
8. Watermelons.

Remark:
Glucose and fructose: All.
Calcium and magnesium: Nos. 3, 7.
Phosphorus: Nos. 1, 7.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Iron: Nos. 1, 3, 7.
Copper: Nos. 1, 3.
Vitamin C: No. 6.
Alkaline: All.
Raw: All.
Laxative: Nos. 2, 4, 5, 6, 7.
Reducing: Nos. 2, 6, 8.
Weight-gaining: Nos. 1, 3, 5.

III. Non-starchy Vegetable Group

1. Asparagus.
2. Beans (green).
3. Beet tops.
4. Broccoli.
5. Brussels sprouts.
6. Cabbage.
7. Cauliflower.
8. Celery.
9. Chard.
10. Chives.
11. Collards.
12. Corn (green).
13. Cress.
14. Cucumbers.
15. Dandelion greens.
16. Dumbari.
17. Eggplants.
18. Endives.
19. Leaves (green).
20. Lettuce.
21. Melons (green).
22. Paprika.
23. Parsley.
24. Patola.
25. Peas (green).
26. Plantain stems.
27. Radishes.
28. Spinach.
29. Squash.
30. Tomatoes.
31. Turnip tops.
32. Watercress.

Remark: Foods listed in this group are, in general, rich in mineral salts and vitamins, anti-toxic and laxative, more suitable for weight-reduction and conducive to health, vitality and bodily purification.

Calcium and magnesium: Nos. 1, 6, 8, 19, 20, 28, 30.
Phosphorus: Nos. 1, 6, 8, 20, 25, 28, 30.
Iron: Nos. 1, 6, 8, 15, 17, 20, 27, 28, 30.
Copper: Nos. 17, 27.
Manganese: No. 19.
Iodine: Nos. 19, 27.
Vitamin A: Nos. 19, 28, 30.
Vitamin B_1: No. 25.
Vitamin C: Nos. 5, 6, 7, 19, 22, 25, 28, 30.
Vitamin E: Nos. 19, 20.
Vitamin K: Nos. 6, 7, 19, 28.
Alkaline: All.
Raw: Nos. 6, 7, 8, 12, 13, 14, 18, 19, 20, 21, 22, 25, 27, 28, 30.
Laxative: Nos. 1, 2, 19 and raw vegetable group.
Reducing: All.

IV. Starchy Vegetable Group

1. Beets.
2. Bread-fruit (Indian).
3. Bulb of Arum Indicum.
4. Carrots.
5. Parsnips.
6. Plantains (green).
7. Potatoes (sweet).
8. Potatoes (white).
9. Pumpkins (sweet).
10. Roots.
11. Turnips.

Remark:
Starch: All.
Calcium and magnesium: Nos. 4, 10, 11.
Phosphorus: Nos. 4, 11.
Vitamin A: No. 4.
Vitamin C: New potatoes.
Vitamin K: Nos. 4, 8.
Alkaline: All.
Raw: Nos. 1, 4, 7, 8, 11.
Laxative: Nos. 1, 2, 4, 5, 9, 10, 11.
Reducing: Nos. 1, 2, 4, 5, 6, 11, if taken moderately.
Weight-gaining: Specially Nos. 7, 8.

V. Cereal Group

1. Barley.
2. Barley meal (ground).
3. Corn (whole).
4. Oat (whole).
5. Rice (brown).
6. Rice flour (whole).
7. Wheat (whole grain).
8. Wheat flour (whole).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Remark:
Starch: All.
Phosphorus: Nos. 4, 5, 6, 7, 8.
Potassium: Nos. 7, 8.
Sulphur: Nos. 4, 7, 8.
Iron: Nos. 1, 2, 4, 5, 6, 7, 8.
Copper: Nos. 1, 2, 4, 5, 6, 7, 8.
Manganese: All.
Iodine: Nos. 4, 7, 8.
Vitamin B_1 All, wheat-germ.
Nicotinamide: Nos. 7, 8, bran, yeast (dried).
Pyridoxin: All (in general); wheat-germ, yeast (dried).
Riboflavin: Yeast (dried).
Vitamin E: All (in general), wheat-germ, wheat-germ oil, rice-germ oil.
Acid-forming: All.
Raw: All (in moderate quantities).
Laxative: Nos. 7, 8, wheat bran.
Weight-gaining: All.

VI. Pulse Group

1. Beans (dry).
2. Canaka (dry).
3. Māṣa (dry).
4. Mudga (dry).
5. Peas (dry).

Remark:
Starch: All.
Protein: All.
Sulphur, iron, copper and manganese: All.
Vitamin B_1: All (in general).
Vitamin D: Perhaps in sun-dried pulses.
Alkaline: All.
Raw: Nos. 2, 3, 4.

VII. Nut Group

1. Almonds.
2. Cashew.
3. Coconut.
4. Pistachios.
5. Walnuts.

Remark:
Carbohydrates: All, especially No. 2.
Fats: All.
Protein: Specially Nos. 1, 4, 5.
Acid-forming: Nos. 2, 4, 5.
Alkaline: Nos. 1, 3.
Raw: All.
Laxative: Nos. 3, 5.
Weight-gaining: All.

VIII. Milk Group

1. Buttermilk.
2. Chānā (Indian fresh cheese).
3. Milk (whole).
4. Skimmed milk.
5. Sour milk.

Remark:
Lactose: No. 3.
Proteins: Nos. 2, 3, 4, 5.
Calcium: All.
Phosphorus: All.
Potassium: No. 3.
Sulphur: No. 3.
Iron: No. 3 (less in quantity but superior in value; it should be supplemented with iron-rich foods).
Copper and iodine: No. 3.
Vitamins A, B_1, nicotinamide and riboflavin: No. 3.
Vitamin D: No. 3, especially summer milk.
Alkaline: All except No. 2 which is neutral.
Raw: All.
Laxative: No. 3.
Reducing: Nos. 1, 4.
Weight-gaining: Nos. 2, 3.

IX. Fat Group

1. Butter.
2. Cream.
3. Ghee (clarified butter).

Remark:
Fat: All.
Vitamins A and D: Nos. 1, 3.
Weight-gaining: All.

X. Sugar Group

1. Honey.
2. Milk sugar (lactose).
3. Molasses.
4. Sugar (brown).
5. Sugar-candy.
6. Syrup.

Remark:
Glucose and fructose: No. 1.
Cane sugar: Nos. 1, 3, 4, 5, 6.
Lactose: No. 2.
Iron: No. 3.
Pyridoxin: No. 3.
Laxative: No. 2.
Weight-gaining: All.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Balanced Diet

In a well-balanced diet acid fruits (Group I), non-starchy vegetables (Group III) and milk should form the important parts. Sweet fruits (Group II), starchy vegetables (Group IV) and cereals (Group V) should be used as fuel foods to supply energy. For additional energy sugars (Group X) and fats (Group IX) may be used. Nuts (Group VII) may also be added. For protein requirements one should depend mainly on milk. It may be supplemented by cereals, pulses (Group VI) and nuts. A certain quantity of raw foods should be eaten daily. Most suitable for the purpose are acid and sweet fruits, non-starchy vegetables and certain starchy vegetables. According to the condition of the bowels the quantities of the laxative foods should be determined. If there is constipation, more laxative foods should be added. The best laxative food is raw milk. To it may be added figs, grapes, mangoes and prunes (Group I), wood-apple, dry figs, and ripe Indian bread-fruit (Group II), and coconut (Group VII). Milk sugar (Group X) may be used in exceptional cases. For reducing purposes more acid fruits (except grapes and mangoes) and non-starchy vegetables should be taken. More sweet fruits, fats (Group IX), sugars (Group X), nuts (Group VII) and plenty of milk should be added to a generally nourishing diet for weight-gaining.

From 60 to 75 grams of protein per day will meet all the needs of the body, even if one takes plenty of physical exercise. In many cases less than 60 grams may be enough. Milk, whole-wheat flour, almonds, spinach, cabbage and tomatoes may meet the daily requirements of protein, taken in right quantities.

Either 24 oz. of milk or 16 oz. of milk with 1 large orange and 2 oz. of carrots will meet the daily requirements of calcium for an adult. Milk, fruits, vegetables and cereals will supply the necessary phosphorus. For the iron requirements a more careful selection of food is necessary. Milk, whole-wheat flour, potatoes, carrots, green peas, tomatoes, cabbage, spinach, bananas, raisins, dates, figs, oranges and almonds in right amounts, will meet the daily requirements of iron for an adult. But there are exceptional cases. If it is not possible to maintain the right number of red cells and right percentage of hemoglobin on the lacto-vegetarian diet, egg yellow, eggs or lean meat may be added.

The daily vitamin A requirements may be met by a daily intake of butter 25 grams, carrots 25 grams and spinach 12 grams. For vitamin B_1 it is desirable to add edible food yeast to a diet consisting of whole-wheat, peas and milk. Barley germ, wheat-germ or rice bran may also be added. A diet consisting of whole-wheat, milk and dried yeast in right quantities will meet the requirements of nicotinamide. Cereals, pulses, molasses and dried yeast will supply pyridoxin. For riboflavin, milk and dried yeast should be added to the daily diet. Fifty grams of orange juice and 25 grams of lemon juice will supply all the necessary vitamin C. In a lacto-vegetarian diet the only reliable source of vitamin D are summer milk and butter. Egg yolk is richer in this vitamin than milk or butter. A liberal quantity of milk and butter combined with sun bath may supply the needed amount of vitamin D. However, if this does not prove satisfactory a few drops of tunny-liver oil or halibut-liver oil should be taken. Regular use of green leaves is necessary for vitamin E. Half an ounce of dry lettuce or half a teaspoonful of wheat-germ oil will meet the daily requirements of this vitamin. The use of green leaves will supply vitamin K.

Right Eating Habits

Eating habits should be strictly regulated for better health, greater efficiency and longer life. Any error in diet is injurious in some way or other and should be avoided.

One should not eat unless one feels hungry and can enjoy the food. Three meals a day will be sufficient even for a man taking very vigorous muscular exercise. Two meals may be sufficient for many persons taking light exercise or leading practically a sedentary life. Three light meals may also be taken by those taking light exercise. More than three meals a day should be allowed only in exceptional cases, such as some cases of emaciation, gastric ulcer or hyperacidity. In many cases it is rather useful to have two meals, such as in obesity, reduced gastric efficiency, high blood pressure, gastritis, etc. One meal plan is not a wise one and should be abandoned. Do not use many kinds of foods at one meal. Do not make foods complicated by adding too much spices, salts, flavourings, fat, sugar, etc. Adulterated foods should be taboo. Fried foods are not good. An adequate quantity of

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

raw vegetables, especially greens, and fresh fruits should be added to the daily diet. Natural foods are always good. All refined foods should be avoided as much as possible.

All dietetic errors should be avoided, and over-eating which is the greatest of them all must be abandoned. That method of cooking by which all the food values are retained should be adopted, especially in cooking vegetables. The best method of cooking is to prepare natural foods in a simple way. Overcooking and complicated cooking should be given up. Avoid tea, coffee, excessive salt, refined flour, refined sugar, rhubarb and hot spices. Do not use sodium benzoate and sulphur dioxide as food-preservatives. Avoid all sorts of wrong food combinations, namely, combining different kinds of fats, different kinds of proteins and different kinds of starches at one meal.

Suggested Menus

We are presenting here for the convenience of the readers a number of sample menus:

Breakfasts:

1. Acid fruits (Group I).
2. Acid fruits.
   Sweet fruits (Group II).
3. Acid fruits.
   Milk (Group VIII).
4. Acid fruits.
   Sweet fruits.
   Milk.
5. Acid fruits.
   Sweet fruits.
   Nuts (Group VII).
   Milk.
6. Acid fruits.
   Sweet fruits.
   Nuts.
   Milk.
   Honey.

Lunches:

1. Raw non-starchy vegetables (Group III).
   Sour milk (Group VIII).
2. Raw non-starchy and starchy vegetables (Groups III and IV).
   Sour milk.
3. Raw non-starchy vegetables.
   Cooked starchy vegetables.
   Butter (Group IX).
   Sour milk.
4. Raw non-starchy vegetables.
   Cooked starchy vegetables.
   Cereals (Group V).
   Butter.
   Sour milk.
5. Raw non-starchy vegetables.
   Cooked starchy vegetables.
   Cereals.
   Pulses (Group VI).
   Butter.
   Sour milk.
6. Non-starchy and starchy vegetables.
   Cereals.
   Butter.
   Nuts.

Dinners:

1. Raw vegetables.
   Cooked vegetables.
   Cereals.
   Butter.
   Milk.
   Honey.
2. Acid and sweet fruits.
   Cereals.
   Pulses.
   Butter.
   Chānā (Group VIII).
   Molasses (Group X).
3. Acid fruits.
   Sweet fruits.
   Nuts.
   Milk.
   Honey.
4. Raw non-starchy and starchy vegetables.
   Acid and sweet fruits.
   Nuts.
   Milk.
   Honey.
5. Cooked vegetables.
   Cereals.
   Pulses.
   Butter.
   Milk.
   Acid fruits.
6. Acid fruits.
   Sweet fruits.
   Chānā.
   Nuts.
   Honey.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter IX

Fasting and Special Diets

FASTING is a natural means of eliminating various wastes and other surplus materials accumulated in the body and of rejuvenating the whole body. When the body is forced to nourish itself from its accumulated materials a higher form of efficiency of the body is developed. The alimentary organs are rested by fasting and as a result the power of digestion and absorption is remarkably improved. The bacterial decomposition in the alimentary canal is checked.

The functional efficiency of the heart is improved by fasting. The blood is cleansed of all impurities and its efficiency increased by it. Elimination through all the eliminative organs is greatly increased during fasting. The mucous membrane of the gastro-intestinal tract acts as an organ of elimination when a fast is undertaken. Even the liver eliminates some wastes in the bile.

Mental and sensory powers are improved by a fast. The memory is strengthened and the power of clear thinking is developed. The vital activities of the cells are increased. The ability of the cells to reconstruct themselves is improved to an extraordinary degree. The increased power of digestion and absorption and the increased ability of the cells to utilize building materials promote growth.

Fasting Defined

Fasting is the abstaining from all kinds of foods, solid and liquid, with the exception of water. In certain cases even water drinking is not permitted. In many cases lemon juice is allowed with water. In some cases even orange juice, about a cup, may be allowed once or twice a day.

The fast may be divided into short, medium and long. A short fast is from 1 to 3 days. A medium fast is from 5 to 12 days. When a fast is continued for a period longer than 12 or 13 days it comes under long fast. The "finish fast" is usually a long fast. The effects of the "finish fast" are the following:

(*a*) The return of hunger.
(*b*) The clearing of the tongue.
(*c*) The clean condition of breath.
(*d*) Disappearance of bad taste from the mouth.

However, a short and occasionally a medium fast is employed in a condition of health in which there is no specific disease in the system. Usually a short fast is enough to give the body a physiological rest, improve digestion and absorption, cleanse the system, build vitality, increase disease-resisting power and stimulate growth. When undertaking a fast for these purposes, water should be drunk freely. This helps elimination.

Conducting a Fast

The following plan may be adopted when undertaking a short or medium fast:

Drink a cup of warm water with fresh lemon juice which should be taken at intervals of 30 to 45 minutes for 3 hours in the morning. Thereafter drink a cup of cold water now and then. Cleanse the stomach and colon with water daily during the fast. Colon-lavage may be done after the warm water-drinking is finished. After the colon-lavage gastric lavage may be done. Mild type of exercise, especially walking and easy breath-exercise, may be taken. Sun bath, air bath, general water bath, outdoor living, rest, relaxation and plenty of sleep are necessary during fasting. A cheerful attitude of mind is to be developed for best results. The duration of a fast is thoroughly dependent on the condition of health, age, sex and the requirements of the person.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Fast-breaking

After a short fast adopt the following plan:

1st day: 8 oz. of orange juice thrice. Pineapple juice may also be taken if orange juice is not available.
2nd day: A meal of acid fruits thrice. Drink water freely. Take colon-lavage if required.

From the 3rd day either milk diet or milk-fruit diet may be adopted.

The following fast-breaking routine may be adopted after the medium fast:

1st day: 8 oz. of orange juice, thrice.
2nd day: Three meals of acid fruits, with free water-drinking between meals and colon-lavage if required.
3rd day: Same as 2nd day.
4th day and thereafter: Milk diet or milk-fruit diet.

Milk Diet

Three great advantages of milk diet are:

(1) It promotes growth.
(2) It encourages the growth of lactic-acid-forming bacteria in the colon and stimulates peristalsis.
(3) It is rich in the secretion of the endocrine glands.

The milk should be clean. It should be handled very carefully. Milking should be very carefully done. The milk to be used in milk diet should not be boiled or pasteurized. For the most satisfactory results milk should be drunk when it is normally warm—that is, not long after it is drawn from the udder. Such milk is rich in endocrine secretions and very beneficial.

Cow milk should be used. Goat milk can also be used. The animals should be perfectly healthy, well-developed and young. They should be well-fed and given plenty of fresh grass and greens and sprouted grains. They should get fresh air, sunshine and exercise. If it is not possible to get milk as mentioned above, the best possible available milk can be used.

During milk diet moderate exercise and sun and air baths may be taken. A warm or rather neutral immersion bath should be taken daily. Colon-lavage may be done, if necessary.

The following is the plan:

1st day: 8 oz. of milk every second hour for 12 hours.
2nd day: 8 oz. of milk every hour for 12 hours.
3rd day: 8 oz. of milk every 45 minutes for 12 hours.
4th day and thereafter: 8 oz. of milk every 30 minutes for 12 hours.

Before commencing with milk, 8 oz. of orange juice should be taken daily. A cup or two of milk may be replaced by the same quantity of orange juice in the afternoon.

The dose and the number of feedings often need to be modified to suit individual conditions. In certain cases skimmed milk or buttermilk may be taken instead of milk.

Milk-fruit Diet

Milk-fruit diet consists of acid and sweet fruits and milk. Skimmed milk and buttermilk may also be taken instead of milk. If necessary, colon-lavage may be done.

The following plans may be adopted:

1st plan:
1st meal—Acid fruits.
2nd meal—Acid fruits, milk.
3rd meal—Same as 2nd meal.

2nd plan:
1st meal—Acid fruits and sweet fruits.
2nd meal—Acid fruits and milk.
3rd meal—Acid and sweet fruits, milk.

3rd plan:
1st meal—Acid fruits and milk.
2nd meal—Acid and sweet fruits, milk.
3rd meal—Same as 2nd meal.

Fruit Diet

In certain cases fruit diet is very beneficial. If it is taken for a day or two now and then, it produces excellent results in the purification and vitalizing of the body. Colon-lavage may be done, if necessary. Water should be drunk freely.

The following plans may be adopted:

1st plan:
1st meal—Acid fruits.
2nd meal—Acid and sweet fruits.
3rd meal—Same as 2nd meal.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

2nd plan:
1st meal—Acid fruits.
2nd and 3rd meals—Same as 1st meal.
3rd plan:
1st meal—Acid and sweet fruits.
2nd and 3rd meals—Same as 1st meal.

Raw Diet

Raw diet is very useful in certain conditions of health. It purifies and alkalinizes the blood. In this diet only raw foods are used. Foods used in this diet consist of raw vegetables, fruits, nuts and some cereals or pulses in raw form. All acid and sweet fruits (Groups I and II), cabbage, cauliflower, celery, green corn, cress, cucumber, endive, green leaves, lettuce, green melon, paprika, green peas, radish, spinach, tomato (Group III), beet, carrot, sweet potato, white potato, turnip (Group IV), cereals (Group V), canaka, māṣa, mudga (Group VI) and nuts (Group VII). Sometimes milk, buttermilk, skimmed milk or sour milk may be added. Cereals and pulses should be soaked in cold water sufficiently long to be softened. Sprouted pulses may be used.

This diet may be taken for a day or two or even for a week with great advantage. Sometimes it may be necessary to continue it longer. Water should be drunk regularly. Colon-lavage may be done, if necessary.

The following plans may be adopted:

1st plan:
1st meal—Acid fruits.
2nd meal—Non-starchy vegetables.
3rd meal—Non-starchy and starchy vegetables.
2nd plan:
1st meal—Acid and sweet fruits.
2nd meal—Non-starchy and starchy vegetables.
3rd meal—Acid and sweet fruits, nuts.
3rd plan:
1st meal—Acid and sweet fruits.
2nd meal—Non-starchy and starchy vegetables.
3rd meal—Sweet fruits, pulses.
4th plan:
1st meal—Acid and sweet fruits.
2nd meal—Non-starchy and starchy vegetables, cereals.
3rd meal—Acid and sweet fruits, nuts.
5th plan:
1st meal—Acid and sweet fruits.
2nd meal—Non-starchy and starchy vegetables, sour milk.
3rd meal—Acid and sweet fruits, milk.

Orange Juice Diet

Orange juice diet is very useful in general toxaemia. It increases elimination and alkalinizes the blood. In many cases it may be adopted in place of fasting. When the vitality is low, the bowels sluggish and the appetite dull, it is highly beneficial to adopt an orange juice diet.

The orange juice diet consists of taking 8 oz. of orange juice every hour, 12 or 15 times a day. At least 6 to 10 glasses of water should be drunk. Colon-lavage should be done daily during this period. The usual duration of the diet is from 3 to 7 days. It can be taken once or twice a year.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter X

The Yoga Method of Internal Cleansing

THE internal cleansing method of Yoga, termed Śodhana, consists of six principal acts. For our convenience's sake these acts may be divided into two main groups: alimentary and pharyngonasal. The cleansing acts for the alimentary canal consist of the oral, oesophageal, gastric, colonic and alimentary canal cleansing processes. The pharyngonasal cleansing is effected by pharyngonasal water baths and nasal thread-cleansing.

Oral Cleansing (Danta-dhautī)

Oral cleansing is necessary for the cleansing of the teeth, tongue and palate and keeping the mouth sweet. It consists of teeth cleansing, tongue cleansing and palatine cleansing.

A fresh semi-hard twig of some suitable tree, called tooth-stick, or some good tooth-powder, is used in cleansing the teeth. A tooth-stick is more cleanly than a tooth-brush. During the teeth cleansing plenty of water should be used. The teeth cleansing should be done twice a day, morning and evening.

The cleansing of the tongue is very important, as it removes deposited matter from the tongue. For this purpose an instrument called tongue-scraper is used. To cleanse the tongue the tongue-scraper should be pulled with both hands with moderate pressure several times from the back of the tongue to the tip, never in a reverse way. Then the tongue should be cleansed with the fingers. The index, middle and ring fingers should be used for this purpose. Plenty of water should be used. Lastly, the tongue should be rubbed with the inner surface of a piece of lemon from which the juice has been squeezed. It cleanses the tongue and sweetens the mouth. The tongue cleansing should be done in connection with the teeth cleansing.

A tongue-scraper is a smooth-edged, thin instrument about $\frac{1}{4}$ inch broad and preferably made of silver, copper, brass or celluloid.

The palate should also be cleansed with water and with the help of the right thumb. It should be done after the cleansing of the tongue. The chewing of apples and some raw foods, oral sun bath by exposing the open mouth to the sun, deep breathing through the mouth and rinsing the mouth with warm or cold water mixed with salt are important oral prophylaxis.

Oesophageal Cleansing (Daṇḍa-dhautī)

The cleansing of the oesophagus is helpful in maintaining oesophageal cleanliness by removing the minute particles regurgitated into it. It also helps gastric emptying through mouth by exciting vomiting. The circulation in the mucous membrane is also stimulated by the rubbing action of the process.

The oesophageal cleansing consists of inserting a straight flexible rod-like structure, such as a flexible fresh twig of Jhāu or Vetra, into the mouth and passing it up to the stomach. It should not be attempted, unless it has been properly taught by an expert. It is not necessary for the ordinary students of physical education to practise it.

Gastric Cleansing

There are two methods of gastric cleansing: gastric auto-lavage (Vamana-dhautī) and gastric cloth-cleansing (Vāsa-dhautī).

Gastric Auto-lavage. It is an excellent means to remove any filthy accumulation, either due to incomplete gastric emptying or regurgitation of intestinal contents, from the stomach and to keep it clean and sweet. If there is any morbid coating on the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

gastric mucous membrane, it is removed by it. It is very helpful in washing out any excess gas and mucus accumulated in the stomach. The gastric muscles and nerves are stimulated by it.

According to Yoga, gastric washing is absolutely necessary for maintaining a high degree of gastric efficiency. We have experienced that it gives a feeling of well-being and a sense of cleanliness and aids in concentration. It is also very helpful in conditions of failing appetite, coated tongue, diminished energy and hyperacidity.

The process consists of drinking water and then vomiting it completely. Drink from 4 to 6 glasses of water. The distention of the stomach may help to induce vomiting. The application of pressure on the stomach by Abdomino-retraction Act is very helpful. However, at the commencing stage the vomiting may be excited by inserting the fingers into the throat. Either the squatting or the standing posture may be assumed.

Ordinarily cold water is used. Sometimes warm water may be necessary. The gastric water bath should be taken in the morning after oral cleansing. It may be taken 5 or 6 days a week for the first 4 weeks. Thereafter it may be done once or twice a week or every 10 days. Whenever there is a lack of appetite and a dull feeling it should be taken in conjunction with a fast. One should not take any food immediately after the lavage.

Gastric Cloth-cleansing. Cloth-cleansing is a special method of gastric cleansing. If there is an accumulation of excess mucus, unused juices and debris, they are completely eliminated by this process. It is an excellent process of internal massage of the oesophagus and stomach. Various kinds of automatic movements of the gastric musculature cause the gastric mucosa to come into direct contact with the cloth swallowed and is properly massaged. This massage stimulates circulation and the vital activities of the mucous membrane.

In cloth-cleansing, a long, clean and narrow piece of fine cloth is necessary. The usual length is about 20 feet and breadth 3 inches. The cloth should first be soaked in clean, cool water and then it should be swallowed gradually. The whole piece of cloth, of course, should not be swallowed. About 10 inches of the free end side of the cloth should always be kept outside the mouth. After the desired length of the cloth is swallowed, it should be very slowly and gently withdrawn by using both hands. When the process is mastered, the swallowing only takes a few minutes.

The cloth-cleansing should be performed when the stomach is quite empty. The best time for its practice is in the morning after finishing the usual oral cleansing. Neither the oesophageal cleansing nor the gastric auto-lavage should be done on those days, when the cloth-cleansing is practised. At the initial stages it is better to practise it more frequently, say two or three times a week. Thereafter it may be done once a week.

The cloth-cleansing is a very healthful practice if done in a right manner. Many of the author's students, both in India and Sweden, have practised it for a long time with very satisfactory results. But its technique should be learnt from an expert. An ordinary student of physical education may omit it. It is contraindicated in gastritis, enteritis, colitis, gastric ulcer, duodenal ulcer and in certain other pathological conditions of the body.

Colonic Cleansing

The necessity of maintaining a clean condition of the colon for the attainment of perfect health and a high degree of the vital vigour is often overlooked. Colonic cleanliness is also absolutely necessary for the attainment of success in breath-control and concentration.

Colonic cleanliness is closely associated with three factors: the bacterial state of the colon, the character of the colon contents and the colonic motility. These three factors are interrelated and interdependent. The colonic bacteria may be divided into two groups: poison-forming and poison-destroying. There is a biological antagonism between the two groups. When one group predominates, the other succumbs. The growth of the poison-forming bacteria is mainly encouraged by protein foods, especially meat, fish and eggs. Meat, fish and eggs readily undergo putrification in the colon. If this type of contents remains in the colon for a longer period of time, the putrefactive bacteria will be given greater opportunity to develop there, and consequently there will be more toxic products. On the other hand, if the colon contents contain more starch and lactose, the growth of the poison-destroying micro-organisms will be promoted and the putrefactive bacteria will be reduced

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

in number and strength. Thus, a diet rich in vegetables, fruit and milk is conducive to the growth of the anti-poison bacteria in the colon. It may be noted here that milk protein does not putrefy in the colon because of the presence of lactose.

Two important changes take place when the benign intestinal bacteria predominate in the colon: increased colonic activity and disappearance of bad odour from the faeces. Milk diet makes the sluggish colon active by building up its muscles and nerves and changing the character of the intestinal flora. The colonic sluggishness is much due to nervous and muscular weakness and the excessive growth of the poison-forming bacteria in the colon.

When the contents of the colon do not remain therein longer than is necessary, the putrefactive bacteria get less chance to thrive. The power of the colon to pass its contents at a normal rate depends upon the building up of a high degree of nervous and muscular efficiency of the colon by right diet and exercise as well as the encouragement of the acid-forming bacteria in the colon by appropriate diet.

In addition to exercise and diet, colon cleansing plays a very important rôle in maintaining health and cleanliness of the colon. It is a very useful hygienic measure to eliminate faecal accumulation, excess gases and products of bacterial decomposition, remove the morbid coating of the colonic mucous membrane and cleanse the haustra, the most inactive parts of the colon. It also stimulates the colon to increased activity. Our experience teaches us that even when the bowels move regularly, the extra elimination obtained by colon-lavage is of much help. The colon washing is also more important to those who cannot keep themselves internally clean by sufficient exercise and right diet.

Colonic Auto-lavage (Jala-vasti)

In Haṭha-yoga, a process known as Jala-vasti (it is also called vasti) has been developed for cleansing the colon thoroughly with water without any instrument. The following is the technique of auto-lavage:

The student is to assume a squatting posture in a bath-tub with water navel-deep. Even a basin, allowing the anus to be immersed an inch or two below the surface of water, will serve the purpose. From 1½ to 2 pints of water will be sufficient to reach the caecum. The process consists of two parts. First, the suction of water through the rectum and then bringing it to the entire colon. Suction of water thoroughly depends upon the changing of the intra-colonic pressure by abdominal control and the voluntary opening of the anal sphincters by anal control. The passage of water through the colon up to caecum is effected by specialized controlled abdomino-muscular movements. Special training is necessary to gain full control over the abdomino-pelvic muscles for the auto-lavage.

First, any faecal accumulation in the anal canal should be removed by a process called Mūla-śodhana (anal cleansing). This process also helps to bring about relaxation and expansion of the anal region, which is useful in the suction of water. The process consists of the insertion into the anal canal of the middle finger and the execution of circular movements with the finger. Before insertion, the nail of the finger should be cut and the finger cleansed and lubricated.

The bowels should first be evacuated before the practice of the auto-lavage. The best time for beginners is in the morning. When the process is mastered, three to five suctions are advised for a thorough cleansing of the entire colon. After each suction the water should be discharged. After the final ejection of water and washing the local part, rest for a few minutes. Then practise Straight-muscle Act a few times and thereafter stay in Peacock Posture for a minute or two. These practices will help the elimination of the remaining water, if there is any.

Perform the colonic auto-lavage twice a week in the evening. The evening practice should consist only of one suction. Once a month from three to five suctions may be done in the morning for a thorough cleansing of the colon. Some of the author's Swedish students are doing the colonic auto-lavage as advised here with excellent results in health. It is necessary to learn the technique of the colonic auto-lavage directly from an expert.

Demonstration of Colonic Auto-lavage under X-rays

By a special invitation, the author's pupil Dinabandhu Pramanick gave a demonstration of

CC-0. Agamnigam Digital Preservation Foundation, Chennai

FIG. G. Radiograph I. Taken in the Karolinska Sjukhuset (Hospital), Stockholm. After the suction of fluid into the colon through the process of Colonic Auto-lavage (Vasti) without instrumental aid. Performed by Dinabandhu Pramanick at the Karolinska Sjukhuset, Stockholm, on August 8th, 1949.

the colonic auto-lavage before a number of distinguished medical men on August 8th, 1949, at the Karolinska Sjukhuset, Stockholm, one of the greatest X-ray centres in the world. Pramanick was first stripped naked and was asked to expose his body to X-rays. His colon was observed under X-rays and an X-ray picture was taken. The observations and the picture showed that the colon was empty. He was then asked to take a liquid contrast medium of barium sulphate from a sitz basin into his rectum, which he did without any instrumental aid. Then again he had to expose his naked body to X-rays, which showed that he was able to suck the contrast medium into the rectum. He then brought the contrast medium to a point on the right side beyond the middle of the transverse colon by his power of muscular control. The whole process was observed through X-rays and at every stage X-ray pictures were taken. We are here reproducing two of the many X-ray pictures taken at the Karolinska Sjukhuset, No. 1 (Fig. G) showing the stage after suction and No. 2 (Fig. H) showing the passing of the contrast medium beyond the middle of the transverse colon. The medical statement follows:

"We have seen Dr. Pramanick demonstrate his ability to take a liquid contrast medium of barium sulphate into his rectum without mechanical aid from a sitz basin. The accompanying X-ray pictures were taken to prove the absence of such medium before and then to show the height to which the medium was taken. Within 30 minutes, under observation all the time, and in standing position, he was able to bring the contrast medium up into the right half of the transverse colon.

"(*Signed*) Sven-Roland Kjellberg,
Med. dr. X-ray Diagnosis Department.
"(*Signed*) Ulf Rudhe,
Med. lic. X-ray Diagnosis Department.
"(*Signed*) Robert P. Marshall, M.D.,
X-ray Diagnosis Department."

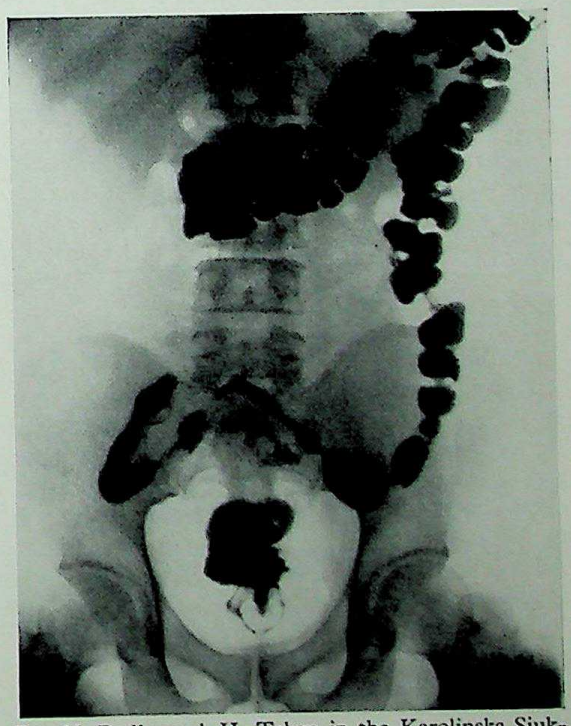


FIG. H. Radiograph II. Taken in the Karolinska Sjukhuset, Stockholm. Showing the contrast medium brought up into the right half of the transverse colon by muscular control by Dinabandhu Pramanick at the Karolinska Sjukhuset, Stockholm, on August 8th, 1949.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The demonstration of the colonic auto-lavage was also given at the British Medical Association, South Indian and Hyderabad branches, St. Luke's Hospital, Chicago, American Naturopathic Association, Pittsburgh (U.S.A.), Imperial University, Physiology Department, Tokyo, St. Luke's International Medical Centre, Tokyo, Madras Medical Association, Hyderabad Medical Association, Physical Therapy Institute of the University of Zürich, Human Morpho-Physiological Society, Paris, Salpétrière Hospital, Paris, etc., by Pramanick.

Enema

Those who are not able to perform auto-lavage are advised to take enema. For cleansing purpose warm enema is more suitable. It is also relaxing. The quantity of water should not exceed 2 quarts. Three or four warm enemas may be taken for a thorough cleansing of the colon. After each enema the bowels should be evacuated. The last warm enema should be followed by a small cold one for its tonic effect. This thorough cleansing should be done once a month and in the morning after normal evacuation of the bowels.

Small cold enema may be taken twice a week and in the evening before dinner. About 1 or $1\frac{1}{2}$ pints of water may be used in a small cold enema. Only clean water should be used. One should not eat at least for half an hour after an enema. The knee-chest position is the best.

Colonic Auto-air Bath (Śuṣka-vasti)

A process of introducing air into the colon for its purification and stimulation has been advised for advanced students. It is performed without any instrumental aid. The air is sucked in the same way as the water in colonic auto-lavage. It is to be practised in the morning and after the colonic auto-lavage. Pramanick has always followed this rule in air suction.

This colonic air bath is an excellent purificatory process as well as an advanced colonic exercise suitable for advanced students. It should be learnt directly from an experienced teacher. Ordinary students may omit it and depend more upon colonic auto-lavage and diet for maintaining colonic cleanliness and health.

Alimentary Canal Auto-lavage (Vāri-sāra)

Alimentary canal auto-lavage is an excellent means for cleansing the whole alimentary canal with water without any instrumentation. It consists of drinking water at certain intervals and passing it from the stomach into the small intestine and thence into the colon, from which it is ejected from the body with the contents of the alimentary canal. It requires extraordinary control over the abdominal muscles to be able to do this. It usually takes from 10 to 15 minutes, when the process is mastered. Pramanick was able to do it in 8 minutes.

Morning is the best time for its practice. The student should first evacuate the bowels and then cleanse the colon with water before commencing the act. This act should be learnt from a competent teacher.

Easy Method of Alimentary Canal Cleansing

We are presenting here two simplified processes of the cleansing of the alimentary canal for ordinary students:

Water-drinking process. Drink a glass of warm water at the intervals of 30 or 40 minutes, 6 or 8 times. It should be done in the morning when the stomach is empty and after normal evacuation of the bowels. After the water-drinking rest for an hour, then take enema. No breakfast should be taken. At noon take only orange juice or some fruits and in the evening a light dinner. This may be done once a week or twice a month.

Water-drinking combined with exercise. First drink a cup of warm water and then commence exercise. A cup of water should be taken between the exercises. From 6 to 8 cups may be drunk between the exercises. The abdominal and spinal exercises are more suitable for the purpose. It is to be done in the morning when the stomach is quite empty and after the normal evacuation of the bowels. It can be performed once or twice a week. Breakfast should be omitted on those days and a very light lunch of fruits and milk and a light dinner should be taken.

Alimentary Canal Auto-air Bath (Vāta-sāra)

The alimentary canal auto-air bath is a very difficult process, the technique of which can only

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

be mastered by an advanced pupil having extraordinary control over the abdominal muscles and certain inner control. By this process the atmospheric air is first swallowed and made to pass into the stomach and thence into the small intestine and large intestine and finally expelled from the body. No instrumental aid is necessary for its performance.

The knee-elbow position is considered the best for air swallowing and passing. Air should be taken through the crow-beak shaped lips. It should be practised in the morning when the stomach is quite empty. Before commencing the practice, the bowels should be evacuated and the stomach and colon should be cleansed with water. It does not take more than 20 minutes to perform the auto-air bath when it is fully mastered. Pramanick was able to do it in 15 minutes. This process is very helpful in prolonged breath-suspension.

Pharyngonasal Water Baths

There are two processes of cleansing the nasal and pharyngeal passages. The first one is the drawing of water through the nostrils and its expulsion through the mouth. It is called Vyutkrama Kapālabhātī (pharyngonasal water bath). The second one, called Śītkrama Kapālabhātī (inverted pharyngonasal water bath), consists of taking a mouthful of water and its explusion through the nostrils. A glass or cup may be used for the purpose. A beginner may use lukewarm water for some time, but cold water should be used in general. These nasal baths may be taken in the morning after oral cleansing.

The nasal baths are useful in removing any waste materials accumulated in the pharyngonasal passages. The circulation in the mucous membrane of the passages is accelerated, its functional efficiency is improved and the local nerves and the brain are invigorated. It has a soothing effect on the brain and the nervous system. After a prolonged mental work these baths, when followed by breathing exercise, are a great restorative.

Nasal Thread-cleansing (Netī)

The nasal thread-cleansing consists of passing a fine soft thread, moistened with water, through one nostril and then ejecting it through the mouth. Another supplementary act is to pass the thread through one nostril and eject it through the other nostril. Both methods can be used together. These acts are best performed in the morning after the oral cleansing.

The thread-cleansing cleanses the passages, absorbs morbid secretions and massages the mucous membrane. The regular use of cold nasal baths and thread-cleansing, according to our experience, prevents colds and catarrh, especially when combined with right diet and exercise.

The nasal baths should be taken first and thereafter the thread-cleansing. They may be practised 3 or 4 times a week or even more. They may also be taken alternately.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XI

The Yoga Method of Endocrine Development

THE endocrine glands play an important rôle in maintaining health and efficiency of the body. When the functional efficiency of these glands begins to decline, the general decline of the bodily and mental powers starts. It becomes, therefore, evident that the building-up of health and functional efficiency of the endocrine system is absolutely necessary.

Gland Transplantation and Vasoligature

An attempt was made to re-energize the devitalized endocrine glands by gland transplantation, vasoligature and organo-therapy. Hetero-transplantation was the popular form of gland transplantation for which the glands of a monkey, a goat or a ram were generally used. Various devices were tried in order to keep the implanted gland alive and to make it function in the human body. But it was found that, in many instances, rather in the majority of cases, the implanted gland did not survive. In some cases, it worked only temporarily.

It was claimed that by the ligature of the vas deferens the interstitial cells are stimulated and developed, while the generative tissue undergoes degeneration by the constant pressure caused by the accumulated external gonadal fluid. It was further claimed that while the generative part of the glands fails to function, the interstitial part tries to compensate it by its increased function. Unfortunately, this device did not produce the desired effects. Moreover, the generative part, which is voluntarily made inactive by vasoligature, may take an important part in the chemical balance of the blood, the exact nature of which is not quite known at present. The destruction of the external function of the gonads by vasoligature is not a sane procedure. We also cannot depend upon glandular preparations for permanent results.

Yoga Method

It should be borne in mind that the endocrine degeneration is not an isolated phenomenon, but indicative of the failure of all the tissues of the body to play their parts in maintaining that chemical and physiological state in which the body as a whole functions efficiently. Are we provided with a mechanism through which we can maintain the harmony of organic functions? According to Yoga, two factors form the essential parts of the mechanism: muscular exercise and the state of the blood.

The development of specialized cells which formed various vital organs was intimately related to the demand of the muscles. The muscles played an important rôle in causing the vital organs to appear and function. An inseparable functional relationship between the muscles and the various organs has existed for millions of years. The cells of the organs as well as of the muscles know how to act in the interest of each other and of the whole body. According to this principle, all the tissues of the body prepare themselves by suitable morphological and physiological changes, and in these changes muscles play a prominent part.

Muscles in action set all the organic system in action to maintain the constancy of the inner medium, the blood. Changes in the blood by muscular activity demand greater and co-ordinated activities of all the vital organs including the

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

nervous and endocrine systems. So, in endocrine development, muscular exercise plays a prominent part which is often overlooked.

Blood Purification

Blood purification is a very important factor in making the endocrine glands function efficiently and for a prolonged period. Exercise will prove most fruitful in energizing these glands when rightly combined with the blood purification method. Fasting, internal cleansing, fruit and milk diets and other factors are involved in blood purification.

In milk diet milk should be taken from a healthy and young cow. Such milk is rich in endocrine substances and very suitable for the purpose. Raw milk should be used. The most satisfactory results are obtained when the milk is drunk immediately after it is drawn from the udder.

When taking ordinary diet, care should be taken to maintain the blood in a normal and pure condition. The diet should consist of sufficient minerals and vitamins. Adequate quantities of antitoxic and laxative foods should be added. A liberal quantity of fresh, clean and naturally warm milk should be added to the daily diet. This will supply an adequate amount of the most suitable protein, calcium and vitamins, and these are necessary to prolong the youth of and give life and efficiency to the tissues, the glandular tissue included. All dietetic errors, especially overeating, should be strictly abandoned. The Yogic lacto-vegetarian diet is an ideal form of diet to maintain a normal blood condition. An increased elimination should be maintained by cleansing processes. Bacterial healthfulness of the alimentary canal and increased colon activity should be specially maintained by Yogic diet, exercise, cleansing, etc.

Endocrine Exercise

Endocrine exercise is that type of exercise which, when rightly applied, causes an accelerated circulation in the endocrine organs. Endocrine exercise may be divided into two groups: dynamic and static. The dynamic form consists of local muscular movements in which the circulation is increased both in the glands and the muscles involved in the exercise. For better results in endocrine development a condition should be created in which there will be a maximum active glandular hyperaemia with a minimum muscular hyperaemia, and this glandular state should be maintained for a prolonged period. This can best be achieved by static posture exercise. However, the most satisfactory results are obtained when both types are combined.

The Exercise Plan for Endocrine Development

Exercise for the pineal and pituitary glands:

Dynamic Form: General posture exercise, neck posture exercise, spinal posture exercise, breath-control exercise, especially Abdomino-short-quick Breath-act.

Static Form: Head Posture, Head Posture exercises, Inverse Act, Inverse Lotus Posture, and Breath-suspension with Chin-lock Act.

Exercise for the thyroid and parathyroid glands:

Dynamic Form: As pineal and pituitary glands. Also Speed-endurance exercise.

Static Form: Shoulder Posture, Inverse Act, and Breath-suspension with Chin-lock Act.

Exercise for the adrenal glands:

Dynamic Form: General posture exercise, spinal posture exercise, abdominal posture exercise, abdomino-retraction act, straight-muscle act and breath-control exercise, especially Abdomino-short-quick Breath-act.

Static Form: Inverse Act, Head Posture and Head-posture exercises.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XII

Gonadal Efficiency and Control

THE gonads play an extraordinary rôle in extracting and concentrating vital elements from the whole body and producing the replica of the man himself, and in converging the sexual urge through which the creative hunger of man is satisfied. The seminiferous tubules of the gonads produce this creative substance, the sperm, which when united with the ovum, gives rise to a new individual.

The testicular hormone plays an important part in influencing muscular development and strength. It helps in maintaining the development and strength of the heart. It regulates the accumulation and distribution of fat characteristic of the male body. It stimulates the blood-making organs and serves to increase the formation of hemoglobin.

Interstitial Cells and Seminiferous Tubules

It is generally accepted, though by no means conclusively proved, that groups of interstitial cells contained in loose connective tissue in the spaces between the seminiferous tubules manufacture the hormone. An attempt was made to develop the interstitial tissue by the ligature of the vas deferens. It was believed that vasoligature creates a more suitable condition for the development of the interstitial cells and their increased functioning by destroying the seminiferous tubules. It is now known that vasectomy does not stop spermatogenesis. Moreover, it has not been demonstrated that there is an actual increase in the interstitial cells as a result of vasoligature. This experiment does not prove that the interstitial cells alone manufacture the hormone.

In case of undescended testes or engrafted male gonads in the abdominal cavity, degeneration of the generative tissue occurs, and finally almost all its parts may disappear. The impairment of the generative part of the gonads is mainly due to greater temperature in the abdomen than in the scrotum. The interstitial tissue is not much affected by cryptorchidism. The degeneration of the generative tissue does not cause any improvement in hormonic function. Rather there is much less hormone production than normal. However, these experiments do not prove that degeneration of the generative part of the gonads causes greater development of the interstitial part, rather the latter is also affected but not to the same degree. Moreover, these experiments do not conclusively prove that the generative tissue is not involved in the production of the sex hormone. They simply demonstrate that the interstitial tissue can influence the accessory sex organs even in the absence of the generative tissue.

In a normal condition, spermatogenesis and hormone production run more or less parallel. It appears that both functions are normally interrelated and interdependent. In the developmental period, spermatogenesis, hormone production and bodily development go hand in hand. So far as our experiences go we find that gonadal wastage in the early developmental period is unsuitable. Moreover, our observations suggest that the external gonadal secretion also influences the body when wastage is prevented. It is also likely that at least at a certain stage of development, the spermatogenic cells of the tubules may manufacture a hormone which strengthens the hormone produced by the interstitial cells and that they may both work in a harmonious manner and most efficiently. Perhaps this joint action is more suitable for the better development of the body and mind, though the hormone of the interstitial cells alone is capable of maintaining the development of the accessory organs of sex. Most probably, normally both the tissues influence the organism, one acting in

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

co-operation with the other, in such a way that the most satisfactory manly type of body and mind, manly strength and character will be developed. We also consider, and this is backed by our experience, that the conservation of the gonadal energy is a highly important factor in maintaining the joint action of the two parts of the gonads and its influence on health, vitality and vigour.

Control of Ejaculation

We do not know much about the influence of the gonadal external secretion on the body except its reproductive function. A certain period of time is necessary for the sperm cells to be matured in the epididymis. Just how much time is necessary for their full growth no one knows—here we can only guess. Neither is it known for how long they remain young. On the other hand, frequent ejaculations give less or almost no opportunity for them to attain their physiological maturity in the epididymis. Even from the point of view of fertilization, excessive gonadal wastage is contraindicated.

If ejaculations are postponed for a reasonably long time, the matured sperm cells will be forced out from the epididymis into the vas deferens by the pressure of the incoming new sperm cells from the seminiferous tubules, as the production of spermatozoa is constant after puberty. The released well-developed sperm cells will get the various external secretions, especially of the seminal vesicles and the prostate gland. The prostatic secretion seems to prolong their life. If ejaculation is checked for a sufficiently prolonged period, the entire system of ducts, especially the epididymis, vas deferens, the ampulla of the vas deferens and the seminal vesicle will be filled with the vital fluid. Normally, seminal vesicles do not serve as reservoirs for sperm cells. But under these conditions the sperm cells are forced to enter into these hollow bags. The life of the released sperm cells from the epididymis seems to be prolonged here because of their having a comparatively free motility and a more favourable environment.

Two factors may be associated with the control of ejaculation. One of the two is this: Do the retained sperm cells in a living state produce any substance having some specific influence on the revitalization of the body and mind? And after their death, do the sperm cells become a source of supplying precious materials to the body, when reabsorbed? Do they aid in maintaining a healthy and efficient condition of both the generative and interstitial parts of the gonads? It seems to us that the external secretion is also a highly precious substance, which may be utilized in the construction and reconstruction of the body. The Yogins found in it the secret of the prolongation of youth, efficiency and life.

The second factor in connection with the control of ejaculation is the transformation of the sex energy by its repression into a supra-sexual form, which is utilized in developing higher physical, mental and spiritual powers. That sexual control is conducive to the maintenance of individual vigour has been demonstrated. The spirit of continued struggle, the power of concentrating emotional, mental and physical energy and the arousing of the dormant powers are really associated with sexual control. Excessive indulgence has the opposite effects.

Yoga Method of Control

It is not an easy matter to prevent the waste of the fluid. The fluid, especially the internal secretion, supplies some chemicals to the blood, which is one of the chief factors responsible for the psychosexual phenomena in man. The emotion and the urge are governed to a very great extent by the chemicals elaborated by the gonads. It is beyond the field of mere psychical adventure. The desire is stirred by imagination, association and various local and general disturbances, and when it is strengthened by experience it becomes extremely difficult to harness this powerful creative force.

In Yoga, a highly scientific method of gonadal control has been evolved. It has been termed Vajrolī mudrā.

Gonadal Control Process (Vajrolī)

The gonadal control process consists of three main stages. At the first stage, students aim at building up sex health and efficiency to a high level. Gonadal efficiency is intimately associated with the following factors: vigorous health of the body, a high degree of nerve power and control, and a very powerful contractile power of the orifices of the ejaculatory ducts. All these are attained

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

through the practice of exercise combined with blood purification and other health-building measures.

The exercise consists of general posture exercise and special exercises. The special exercises consist of abdominal posture exercise, spinal posture exercise, pelvic posture exercise, abdomino-control exercise and pelvic control exercise. In addition to these exercises, a special measure is to be taken to relieve pelvic congestion. This is most fruitfully effected by inverse body posture exercise, specially when they are maintained for a prolonged period. Inverse Act and Head Posture are the best for the purpose.

A high degree of the retentive power and gonadal vigour with well-controlled urge and decongested organs will be attained, if the exercises are practised according to the direction of a competent teacher. At this stage, a student will be able to use sexual vigour reasonably avoiding all sexual excesses. He will now experience that the act is health-giving and has a vitalizing effect on the body. At the second stage, the pelvic control exercises are carried to a point when it is not only possible to prolong the act to a very great extent, but to perform the act without wastage. In a prolonged act, the system is given full opportunity to produce the internal and external secretions of the gonads in large quantities, to cause an increased absorption of the internal secretion into the blood, and to distribute the vital chemicals from the gonadal secretions to all the cells of the body. In other words, the whole system is re-energized by this process.

The second stage may be subdivided into two parts. At first, the special abdomino-pelvic exercises are practised in conjunction with indirect contact and direct passive contacts. When this phase is mastered, the students are advised to practise the exercises with dynamic contact. Three important factors are involved in the gonadal exercises: internal muscular control, special breathing technique and special concentration.

It is extremely difficult to reach the final stage of the control process, but when it is acquired, the maximum gonadal control and efficiency are attained. To attain success in the final stage, the student should master the following two practices: penile contraction act and urethral act. In the penile contraction act the male organ can be completely drawn inside the body by voluntary effort. The writer has demonstrated this in India and abroad. The main object of the urethral act is to attain urethral control. It culminates in the development of the suction power per urethra without any mechanical aid. It is demonstrated in the following manner: Fluid is sucked into the bladder per urethra without any instrumental aid. The bladder demonstration is not mainly intended for cystic lavage, but it is definitely related to the gonadal exercise. At the last stage the atmospheric air can be sucked per urethra without instrumentation. Pramanick has demonstrated the suction of milk and air per urethra without any mechanical help at the Physicians' Square Club of Greater New York, St. Luke's Hospital, Chicago, the 43rd Congress of the American Naturopathic Association, Macfadden's Physical Culture Institute, New York, the Physiology Department of the Imperial University, Tokyo, St. Luke's International Medical Centre, Tokyo, 1949 World Physical Culture Congress, Stockholm, Human Morpho-physiological Society, Paris, Salpétrière Hospital, Paris, Kinesitherapy Society, Paris, etc., as well as before many eminent medical men in India, America and Europe.

An Experiment

The writer conducted a series of experiments in connection with gonadal control. During one of these experiments the following facts were revealed: The subject was a middle-aged person, physically well-developed, muscular, very strong and highly sexed. He regularly took exercise, and kept himself clean internally by cleansing methods. His exercise, diet and internal baths, although they gave him health, strength and vitality, did not help him much in controlling the sex urge and nocturnal emission. Then he was prescribed the Yoga method of special exercises for gonadal control. The gonadal exercises were added to his general exercise. After three years' regular practice the following results were obtained: (1) he gained greater control over the urge and he could restrain it continually for a year or more; (2) during the restraint period of one year he had not a single nocturnal emission; and (3) at the close of the restraint period he was as virile as he was before.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Part II

TECHNICAL ASPECTS OF YOGA EXERCISE

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XIII

Spinal Posture Exercise

POSTURE exercise is of two types: dynamic and static. It is not necessary to consider each type of exercise separately except for a few folded-legged postures. It is more convenient to consider each exercise from both standpoints.

Starting Positions

There are certain positions which are assumed when starting posture exercise. These may be called starting positions. They may be classified into two: horizontal positions and vertical positions. Still there is another type of position in which the body is inverted.

The horizontal starting positions consist of three main positions: Corpse Posture or Supine-lying Posture, Prone-lying Posture and Side-lying Posture. The principal vertical starting positions are Standing Posture, Kneel Posture, Adamantine Posture, Squat Posture and Right-angle Posture.

In Corpse Posture the body is lying on the floor with the face upward, arms by the sides. In Prone-lying Posture the body lies on the floor with face downward, arms by the sides. In Side-lying Posture the body lies on the right or left side with the upper trunk, pelvis and legs in straight line, the top arm by the side and the under arm as advised.

In Standing Posture the individual stands with the body erect, the arms hanging by the sides and either with the feet slightly separated and parallel or with the heels together and the toes pointing slightly outward. In Kneel Posture the kneeling posture is assumed in which the individual stands on his knees, the body erect, arms by the sides. In Adamantine Posture one is to sit with the legs folded anteroposteriorly under the thighs bending at the knees, the feet placed by the sides of the anus and under the buttocks, the soles upward, and the palms on the knees. In Squat Posture the squatting position is assumed. In Right-angle Posture one sits with the body erect, the legs extended in front and the arms by the sides.

Spinal Posture Exercise Defined and Classified

Spinal posture exercise is based on the normal movements of the spinal column. These movements are flexion, extension, lateral flexion and rotation. When the body is bent forward and downward from the erect position, the movement is called flexion. Where the body goes back to the erect position or bent backward and downward, it is called extension. Lateral flexion is the sideward bending of the body and rotation is the twisting of the body. Flexion occurs most freely in the cervical, upper thoracic and lumbar regions of the spine, extension in the cervical and lumbar regions, lateral flexion in the cervical and lumbar regions and rotation in the cervical and thoracic regions.

Spinal posture exercise is a form of exercise designed to bring into play the muscles concerned in the spinal movements in a graduated manner, thus creating a most suitable condition for their development and control and through them for the whole body. It develops nervous, glandular, circulatory, digestive, respiratory and eliminative efficiency, increases the vital vigour and endurance, promotes health and invigorates the general system. It is an indispensable part of any form of exercise programme.

Spinal posture exercise consists of four forms of exercise: posterior trunk-bend posture exercise, anterior trunk-bend posture exercise, lateral trunk-bend posture exercise and trunk-twist posture exercise. The thoracic and the lumbar regions of the spine are principally involved in these exercises. The cervical spine needs special exercise which is termed neck posture exercise, considered

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

separately for our convenience. In fact, spinal exercise is incomplete without neck exercise.

The principal muscles involved in posterior trunk-bend posture exercise are the sacrospinalis group (thoracic and lumbar portions), which includes the iliocostalis lumborum, iliocostalis dorsi, longissimus dorsi and spinalis dorsi, and the semispinalis dorsi. These muscles are assisted by the multifidus (thoracic, lumbar and sacral portions), rotatores, interspinales (thoracic and lumbar portions), intertransversarii (thoracic and lumbar portions) and levatores costarum. These spinal muscles are directly involved in this form of exercise. The spinal muscles are assisted in this form of exercise by the trapezius, latissimus dorsi and quadratus lumborum.

The principal muscles involved in anterior trunk-bend posture exercise are the rectus abdominis, obliquus externus abdominis and obliquus internus abdominis. These muscles are assisted by the psoas major and psoas minor. These are the abdominal muscles. This spinal exercise is, in fact, the abdominal exercise. In posterior trunk-bend posture exercise the spinal muscles are contracted and the abdominal muscles are stretched. On the other hand, in anterior trunk-bend posture exercise the abdominal muscles are contracted and the spinal muscles are stretched. For the full development of the muscles, they should be fully contracted and stretched by exercise. The abdominal muscles are spinal muscles and abdominal exercise is in reality spinal exercise.

The principal muscles employed in lateral trunk-bend posture exercise are the sacrospinalis group (thoracic and lumbar portions), quadratus lumborum, obliquus externus abdominis and obliquus internus abdominis. They are helped by the semispinalis dorsi, intertransversales, levatores costarum, rectus abdominis, psoas major, psoas minor and latissimus dorsi.

The principal muscles involved in trunk-twist posture exercise are the sacrospinalis (thoracic and lumbar portions), semispinalis dorsi, multifidus, rotatores, levatores costarum, obliquus externus abdominis and obliquus internus abdominis. In co-operation with one another, the spinal and abdominal muscles take part in these four forms of exercise, some are contracting, while others are relaxing and stretching. For full muscular development the condition of full contraction and stretching are the sine qua non. The spinal development is intrinsically related to nerve vigour, organic efficiency and natural healthfulness of the body. The abdominal development is a most important part of the alimentary purificatory processes and breath-control. It is so important in Yoga that special posture exercise termed abdominal posture exercise has been developed for its attainment (see under Abdominal Posture Exercise).

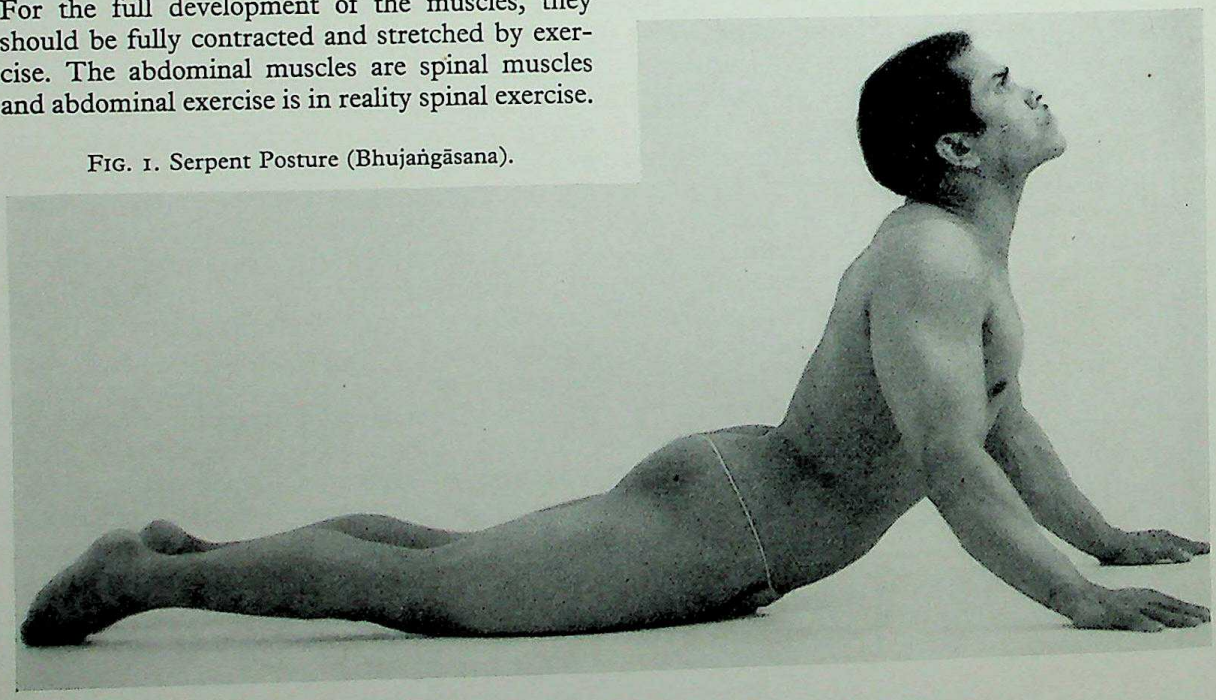


FIG. 1. Serpent Posture (Bhujaṅgāsana).

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Posterior Trunk-bend Posture Exercise

The exercises listed under this head cause contraction of the spinal muscles and stretching of the abdominal muscles. For the most satisfactory results these exercises should be applied in a graduated manner by a right selection. This applies to all posture exercises. The mind should be concentrated upon the muscles principally involved in the exercise. In all posterior trunk-bend posture exercises the mind should be concentrated on the spinal muscles. But at the preliminary stage more attention should be given to perfecting the exercise. After the exercise is fully mastered, the mind should be fully concentrated on the contracting muscles.

The exercises are as follows:

1. *Serpent Posture*

Stage 1: Assume prone-lying position with feet together, palms at the shoulder width.

Stage 2: Raise the head and the trunk from the lower part of the abdomen upward and backward as much as possible by straightening the arms almost fully or fully. Maintain the final attitude for a few seconds (Fig. 1).

Stage 3: Return to stage 1.

Breathing. Inhale in stage 2, exhale in stage 3, when the movements are executed rhythmically after the exercise is mastered. In mastering the movements it may be necessary to take more time in executing the raising movement. In that case breathing should be normal. This applies to all exercises. Moreover, breath should not be held in any exercise unless specially mentioned.

Concentration. On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed without any break.

Static Application: Maintain the final attitude (stage 2) as per instruction. Breathing is usually normal. This applies to all exercises.

Relaxation: After completion of the exercise, either dynamic or static, relax in Prone-lying Posture.

2. *Snake Posture*

Stage 1: Assume prone-lying position with the hands clasped behind the back.

Stage 2: Raise the head and the trunk from the lower part of the abdomen upward and backward as much as possible without any jerk. Maintain the final attitude for a few seconds (Fig. 2).

Stage 3: Return to stage 1.

Breathing: Inhale in stage 2 and exhale in stage 3.

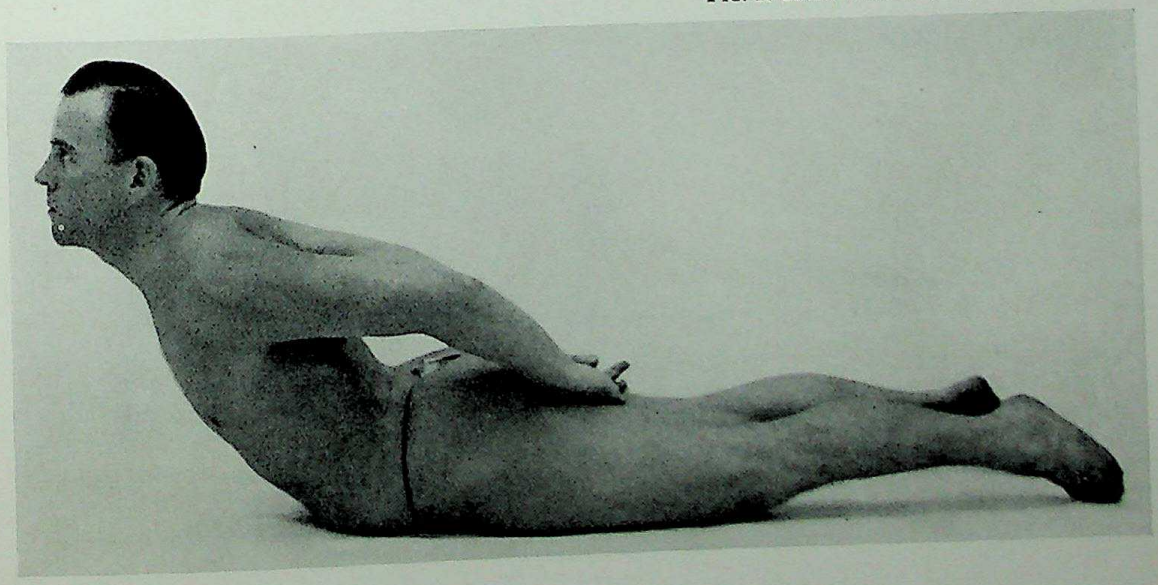
Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, either dynamic or static, relax in Prone-lying Posture.

FIG. 2. Snake Posture (Sarpāsana).



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

3. *Back-raise Posture with Forearms Locked Behind Head*

Stage 1: Assume prone-lying position with the forearms locked behind the head (i.e. arms bent at elbows, folded elbows placed one upon the other, resting on the head, hands on the scapular region, right on the left side and left on the right side).

Stage 2: Raise the head and the trunk from the lower part of the abdomen upward and backward as much as possible without any jerk. Maintain the final attitude for a few seconds (Fig. 3).

Stage 3: Return to stage 1.

Breathing: Inhale in stage 2 and exhale in stage 3.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Prone-lying Posture.

Remark: It is desirable in many cases for the development of strength and flexibility to practise first Back-raise Posture with hands clasped behind head in which the hands are clasped behind the neck instead of the forearms locked behind the head.

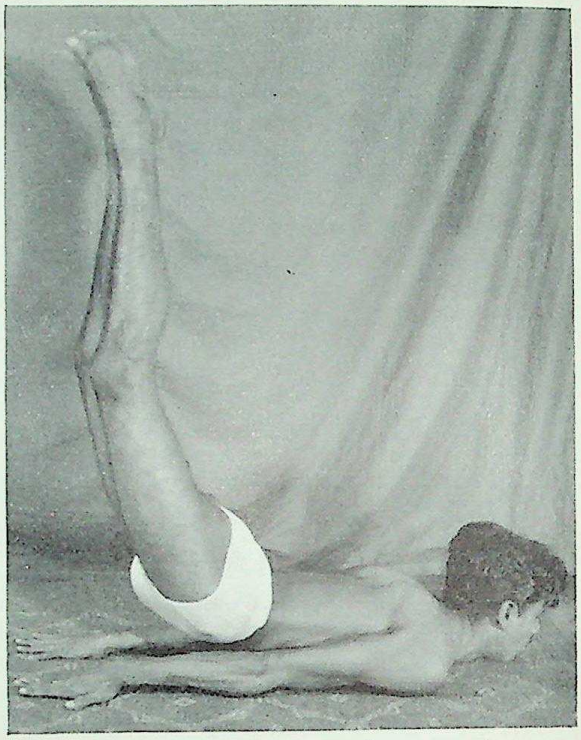
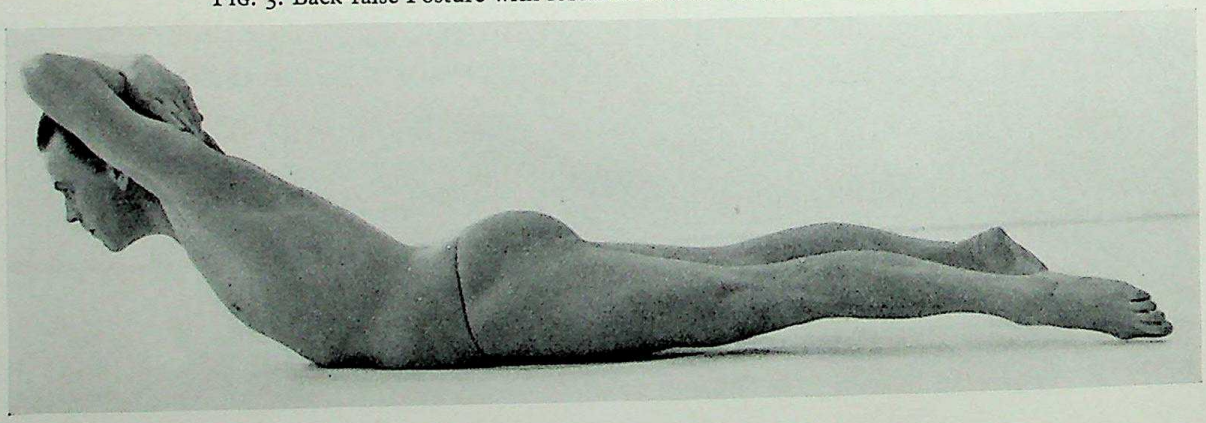


FIG. 4. Locust Posture (Śalabhāsana).

FIG. 3. Back-raise Posture with forearms locked behind head (Makarāsana).



4. *Locust Posture*

Stage 1: Assume prone-lying position with arms by the sides and palms either upward or downward.

Stage 2: Raise the legs as high as possible, supporting on the hands and the upper part of the body. Maintain the final attitude for a few seconds (Fig. 4).

Stage 3: Return to stage 1.

Breathing: Inhale in stage 2 and exhale in stage 3.

Concentration: On the spinal and back muscles, especially the lumbar region and latissimus dorsi.

Dynamic Application: Stages 2 and 3 should be alternately executed.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Static Application: Raise the legs while inhaling, or first inhale and hold the breath and then raise the legs to the maximum point. Maintain the final attitude while holding the breath as per instruction. Then lower the legs while exhaling.

Relaxation: After completion of the exercise, dynamic or static, relax in Prone-lying Posture.

Remark: It is desirable in many cases to increase the strength of the muscles involved in Locust Posture by first practising Modified Locust Posture in which one leg is raised at a time instead of both legs. Both legs, of course, should be exercised in this way.

5. *Bow Posture*

Stage 1: Assume prone-lying position with arms by the sides.

Stage 2: Bend the legs on to the thighs, extend the arms and grasp the ankles with the hands. The knees may either be kept close to each other or a few inches apart.

Stage 3: Raise the head, trunk and thighs as high as possible without any jerk. Maintain the final attitude for a few seconds (Fig. 5).

Stage 4: Return to stage 2.

Stage 5: After completion of the exercise, return to stage 1.

Breathing: Inhale in stage 3 and exhale in stage 4.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Maintain the final attitude (stage 3) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Prone-lying Posture.

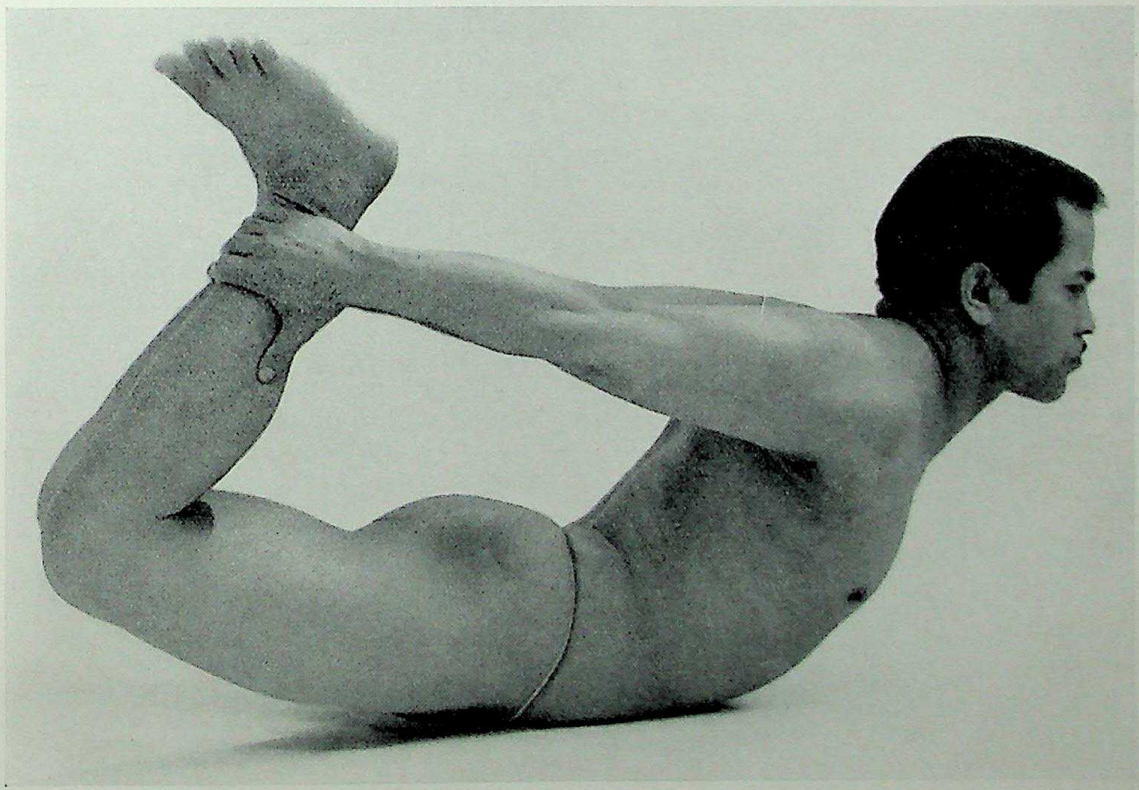


FIG. 5. Bow Posture (Dhanurāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

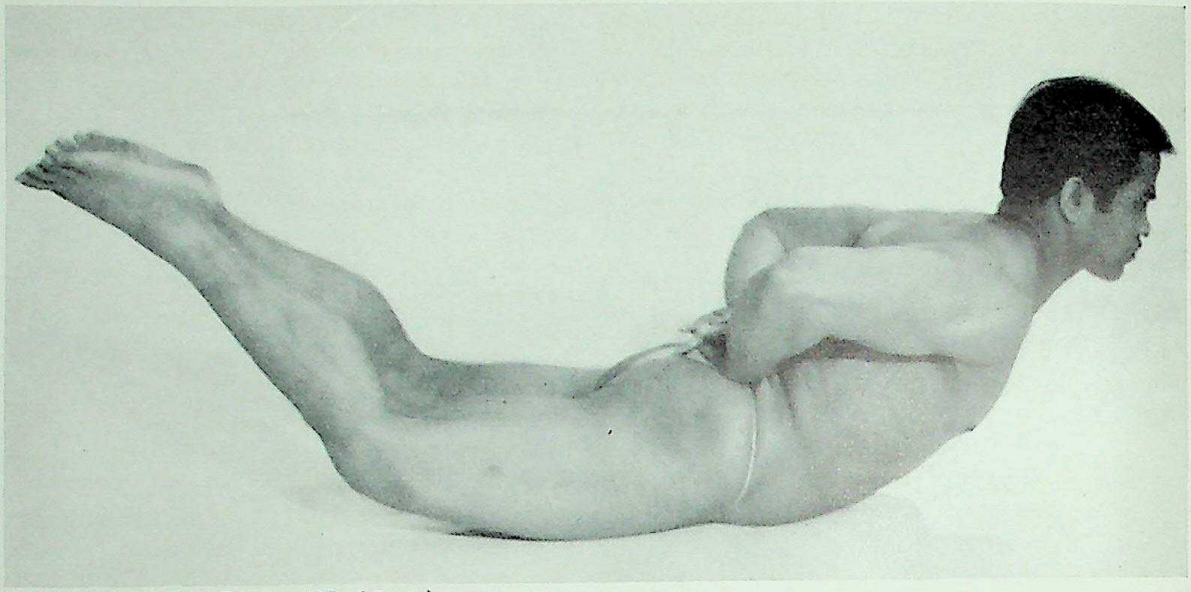


FIG. 6. Boat Posture (Naukāsana).

6. *Boat Posture*

Stage 1: Assume prone-lying position with the hands clasped behind the back.

Stage 2: Raise the head, trunk and legs as high as possible without any jerk. Maintain the final attitude for a few seconds (Fig. 6).

Stage 3: Return to stage 1.

Breathing: Inhale in stage 2 and exhale in stage 3.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Prone-lying Posture.

7. *Swing Posture*

Stage 1: Assume prone-lying position with the arms extended forward.

Stage 2: Raise the head, trunk, the extended arms and legs as high as you can without any jerk, supporting the body mainly on the lower part of the abdomen. Maintain the final attitude for a few seconds (Fig. 7).

Stage 3: Return to stage 1.

Breathing: Inhale in stage 2 and exhale in stage 3.

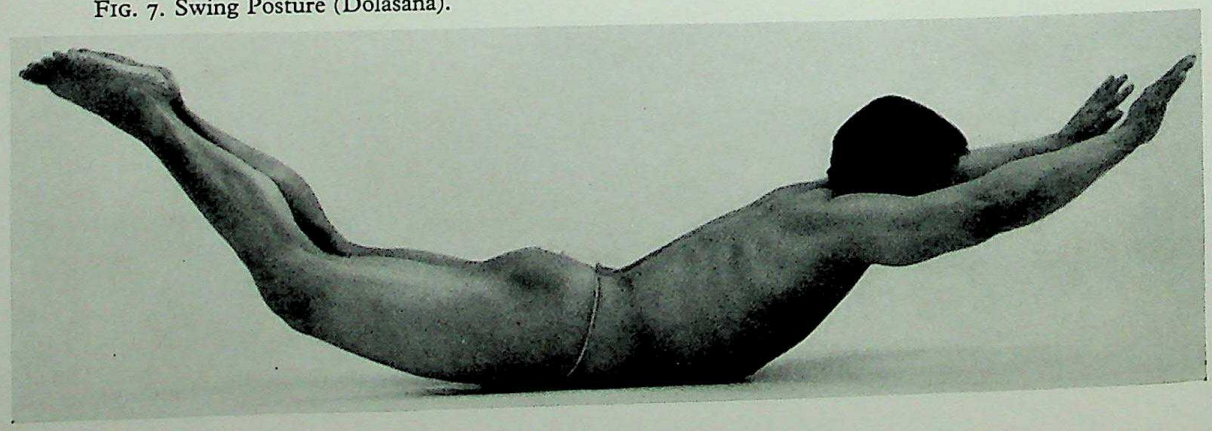
Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Prone-lying Posture.

FIG. 7. Swing Posture (Dolāsana).



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

FIG. 8. Serpent-king Posture (Bhujaṅgendrāsana).

8. *Serpent-king Posture*

Stage 1: Assume prone-lying position with feet together and palms at the shoulder width.

Stage 2: Raise first the head and the trunk upward and backward to the fullest extent by straightening the arms fully. Then carry the movement further by bending backward the head and the trunk and especially the dorsolumbar region of the spine and at the same time raising up the hips and thighs and elevating the legs, bending them at the knees, until the toes meet the back of the head. The movement should be continuous and non-jerky. The final attitude should be maintained for a few seconds (Fig. 8).

Stage 3: Return to stage 1.

Breathing: (*a*) Before the movement is mastered, breathing should be normal throughout stage 2; (*b*) after the movement is well-controlled, inhale in stage 2, exhale in stage 3.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Corpse Posture or Prone-lying Posture.

9. *Cuckoo Posture*

Stage 1: Assume prone-lying position with feet together or a few inches apart and palms at the shoulder width.

Stage 2: Raise the whole body a few inches off the floor, supporting it on the hands and toes.

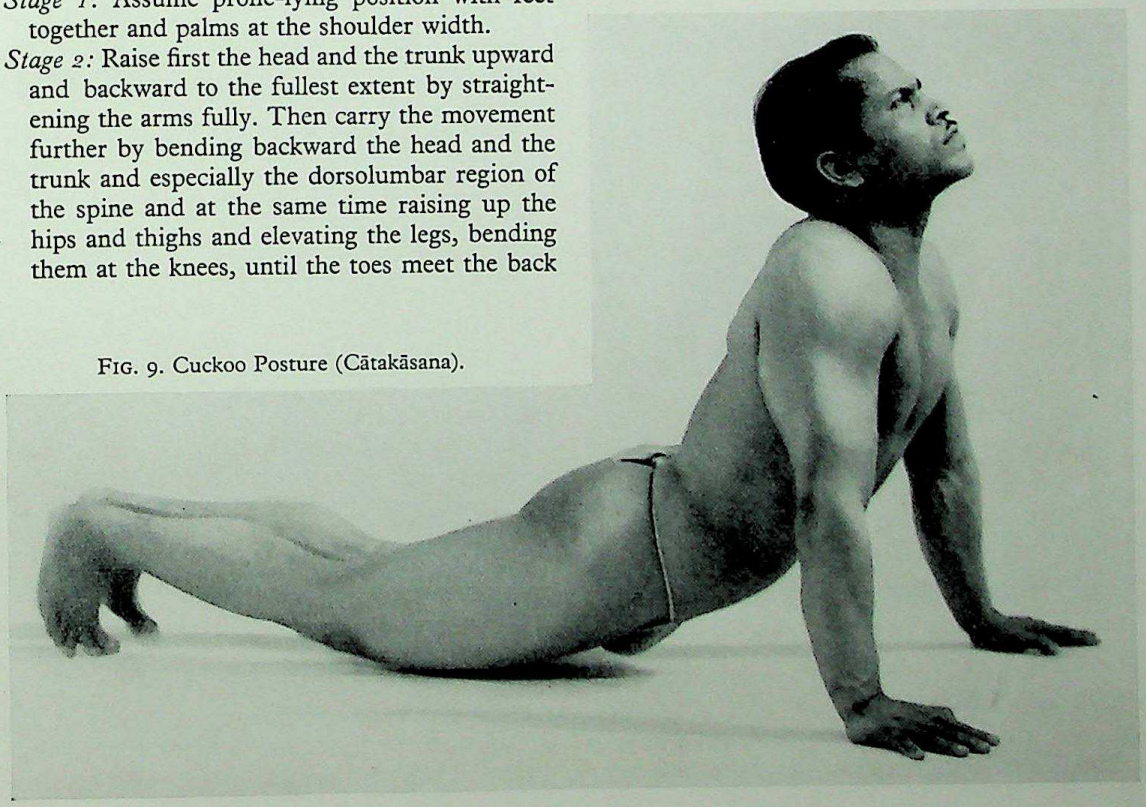


FIG. 9. Cuckoo Posture (Cātakāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 3: Raise the head and the trunk upward and backward from the hips as much as possible by straightening the arms without allowing the legs to touch the floor. Now try to bend the trunk still further backward. Finally, make the whole range of movement into a continuous one. Maintain the final attitude for a few seconds (Fig. 9).

Stage 4: From the final attitude (stage 3) raise the hips as high as you can. From this position return to stage 3.

Stage 5: At the completion of the exercise return to stage 1.

Breathing: Breathing should be normal until the whole range of movement becomes continuous. Thereafter inhale in stage 3 and exhale in stage 4.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Maintain the final attitude (stage 3) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Prone-lying Posture.

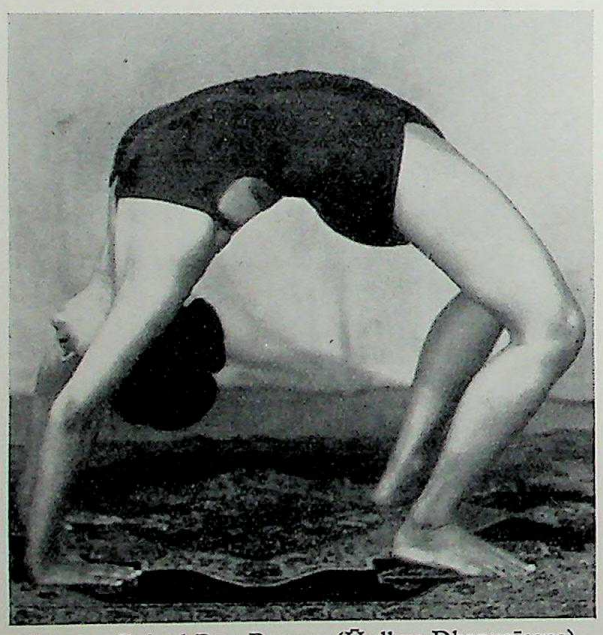


FIG. 10. Raised Bow Posture (Ūrdhva Dhanurāsana).

10. *Raised Bow Posture*

Stage 1: Assume supine-lying position with the legs drawn to the buttocks bending at the knees and the palms placed on the floor by the shoulders bending at the elbows.

Stage 2: Raise the body upward into a bridge position by straightening the arms and legs and supporting the body on the palms and feet. Maintain the final attitude for a few seconds (Fig. 10).

Stage 3: Lower the body to stage 1.

Breathing: Inhale in stage 2 and exhale in stage 3.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Corpse Posture.

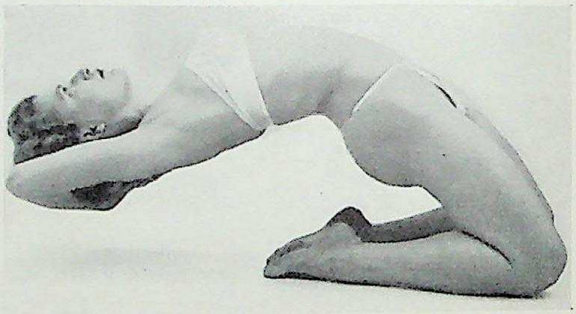


FIG. 11. Bent-head Adamantine Posture (Nataśira Vajrāsana).

11. *Bent-head Adamantine Posture*

Stage 1: Assume kneeling position with the forearms locked behind the head.

Stage 2: Slowly bend the head and the body backward and downward until the head touches the floor (Fig. 11).

Stage 3: Return to stage 1 slowly.

Breathing: Normal.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Not suitable.

Relaxation: After completion of the exercise, relax in Adamantine Posture.

Remark: This is an advanced exercise both for back and abdomen. To increase sufficient strength and flexibility of the back, it is advantageous to practise this exercise first with the hands on the thighs and then with the hands clasped behind the neck.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

12. *Modified Wheel Posture*

Stage 1: Assume standing position with the feet together or a few inches apart and the arms overhead.

Stage 2: Bend slowly the trunk from the waist backward and downward until it is horizontal. Maintain the final attitude for a few seconds (Fig. 12).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Not suitable.

Relaxation: After completion of the exercise, relax in Standing Posture.

Remark: The movement should be executed slowly and without any jerk. The legs will not be allowed to bend at the knees.

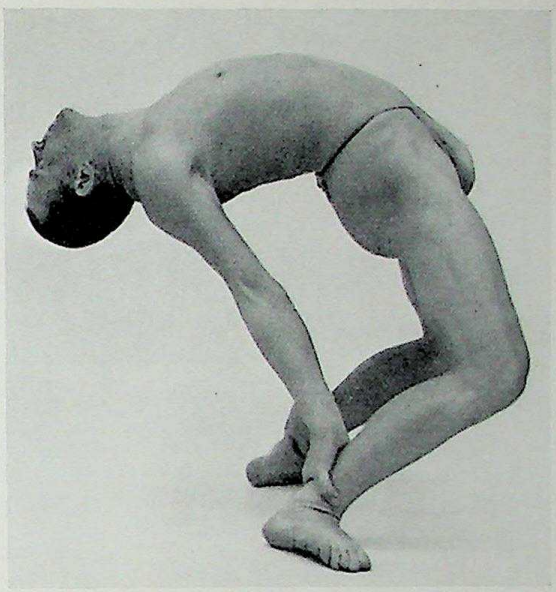


FIG. 13. Back Posture (Pṛiṣṭhāsana).

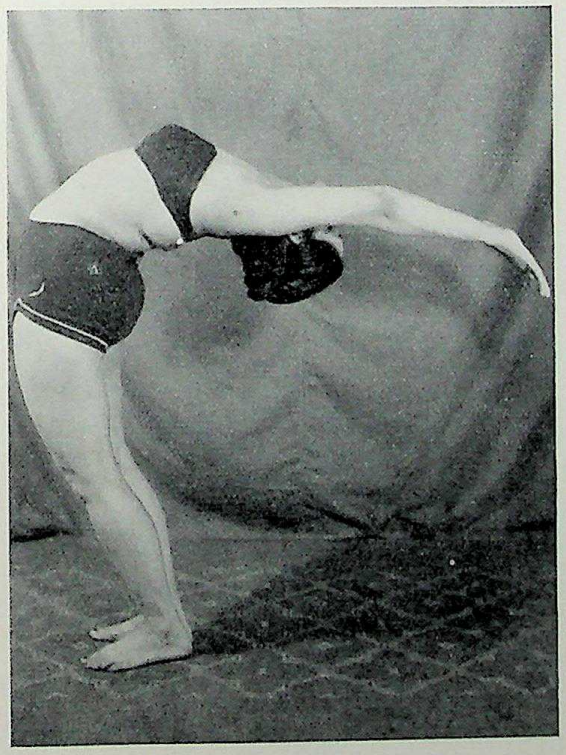


FIG. 12. Modified Wheel Posture (Ardha Cakrāsana).

13. *Back Posture*

Stage 1: Assume standing position with the feet apart and the arms by the sides.

Stage 2: Bend slowly the trunk from the waist backward and downward until you are able to hold the ankles with the hands of the extended arms. Maintain the final attitude for a few seconds (Fig. 13).

Stage 3: Return to stage 1. Ordinarily the movement will be discontinued after the final attitude is assumed. Then again the movement will start from the standing position.

Breathing: Normal.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 can be alternately executed after sufficient strength is developed.

Static Application: Not suitable.

Relaxation: After completion of the exercise, relax in Standing Posture.

Remark: It is an advanced spinal exercise.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

14. *Wheel Posture*

Stage 1: Assume standing position with the feet a few inches apart and the arms overhead.

Stage 2: Bend slowly the trunk and the arms along with the head from the waist backward and downward until the palms are placed on the floor. The hands then will be brought in contact with the heels. Maintain the final attitude for a few seconds (Fig. 14).

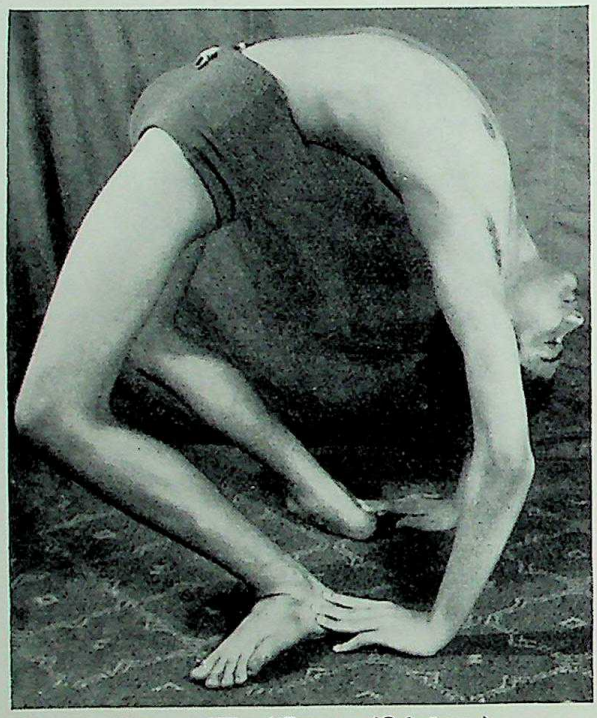


FIG. 14. Wheel Posture (Cakrāsana).

Stage 3: It requires unusual abdominial strength to return to stage 2 slowly. Ordinarily the movement will be discontinued after the final attitude is assumed (stage 2). Then again the movement will start from the standing position.

Breathing: Normal.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 2 and 3 can be alternately executed after sufficient strength is developed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, relax in Standing Posture.

Remark: It is an advanced spinal exercise.

Anterior Trunk-bend Posture Exercise

The exercises listed under this head cause contraction of the abdominal muscles and stretching of the spinal muscles. The mind should be concentrated upon the abdominal muscles during the exercise.

The exercises are as follows:

1. *Back-stretch Posture*

Stage 1: Sit with the legs extended in front, feet together, arms bent at the elbows and at the level of the shoulders, forearms and fingers extended forward, body erect.

Stage 2: Bend the body forward and downward and extend simultaneously the arms forward and grasp the big toe or all the toes with the hands. Then bend the head until the forehead touches the knees. The legs should be kept perfectly straight throughout the exercise. The arms may either be bent at the elbows or kept straight while holding the toes. Maintain the final attitude for a few seconds (Fig. 15).

Stage 3: Return to stage 1.

Breathing: Exhale in stage 2, inhale in stage 3.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in the sitting position with the legs extended forward and the arms hanging by the sides.

Remark: This exercise relaxes and stretches the hamstring muscles and helps in securing full flexion at the hip joints.

2. *Head-knee Posture*

Stage 1: Sit with the right heel pressed against the perineum, the left leg fully extended forward, the arms bent at the elbows and held at the level of the shoulders, the forearms and fingers extended forward, and the body erect.

Stage 2. Bend the body forward and downward and simultaneously extend the arms forward and grasp with both hands the big toe or all the toes of the left foot. Finally, bend the head

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

FIG. 15. Back-stretch Posture (Paścimatānāsana).

until the forehead touches the left knee. The extended leg should be kept perfectly straight throughout the exercise. Maintain the final attitude for a few seconds (Fig. 16).

Stage 3: Return to stage 1.

Breathing: Exhale in stage 2 and inhale in stage 3.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in the sitting position with the legs extended forward and the arms by the sides.

Remark: Same as in Back-stretch Posture. The exercise should also be performed with the right leg extended.

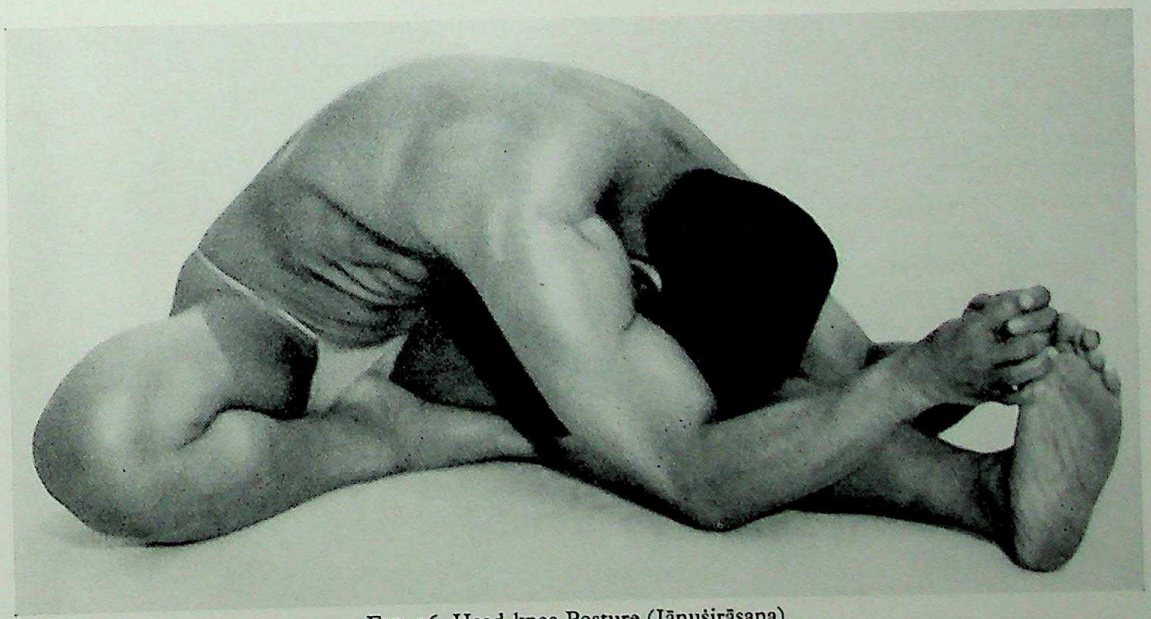


FIG. 16. Head-knee Posture (Jānuśirāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

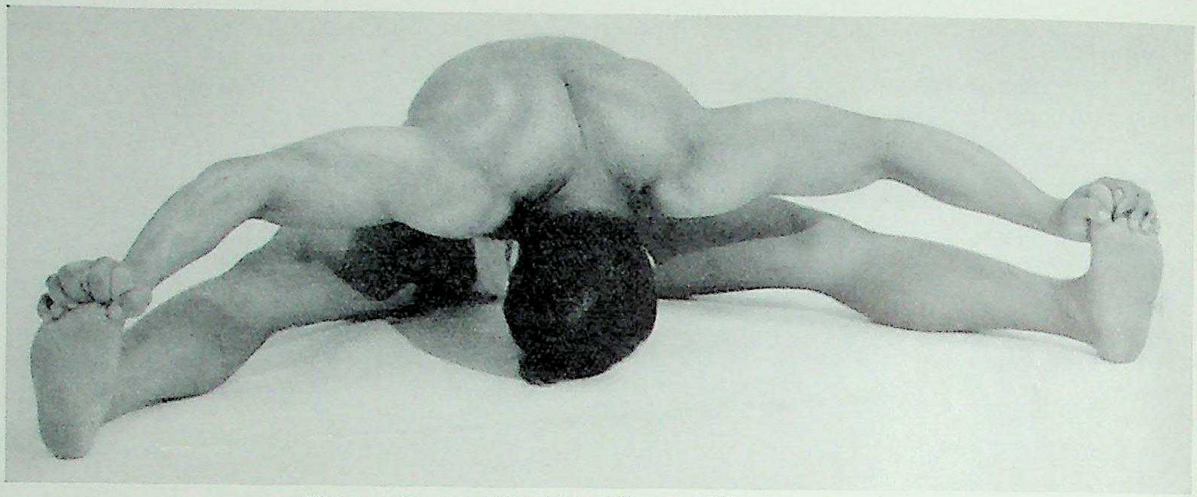


FIG. 17. Forward Head-bend Posture (Bhūnamanāsana).

3. *Forward Head-bend Posture*

Stage 1: Sit with the legs extended but kept far apart, the arms bent at the elbows and held at the level of the shoulders, the forearms and the fingers extended forward, the body erect.

Stage 2: Bend the body forward and downward and at the same time extend the arms forward and grasp the big toe or all the toes of both feet with the hands. Finally, bend the head until the forehead touches the ground. The legs should be kept perfectly straight throughout the exercise. Maintain the final attitude for a few seconds (Fig. 17).

Stage 3: Return to stage 1.

Breathing: Normal until the posture is perfected and mastered. Thereafter, exhale in stage 2 and inhale in stage 3.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in the sitting position with the legs extended forward and the arms by the sides.

Remark: This exercise causes the relaxation and stretching of the hamstring muscles to an extraordinary degree.

4. *Head-bend Posture*

Stage 1: Sit with the legs extended but kept far apart, the hands clasped behind the back, the body erect.

Stage 2: Bend the body forward and downward until the head touches the ground. The legs should be kept perfectly straight throughout the exercise. Maintain the final attitude for a few seconds (Fig. 18).

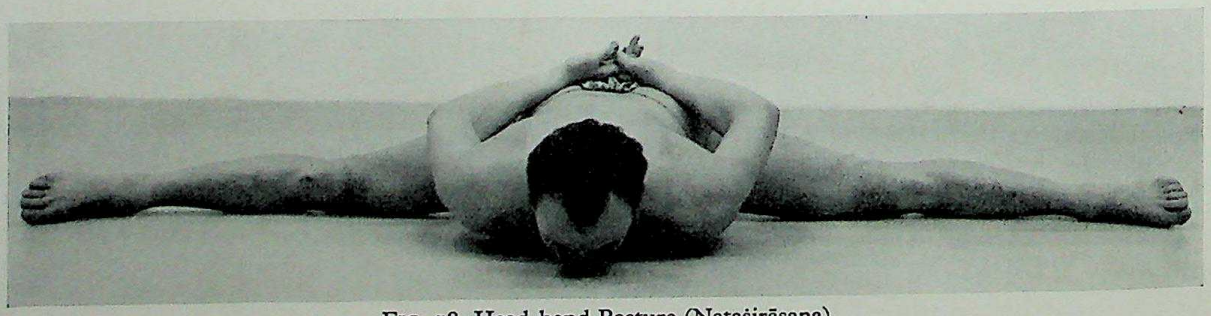


FIG. 18. Head-bend Posture (Nataśirāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 3: Return to stage 1.
Breathing: Normal until the posture is perfected and mastered. Thereafter, exhale in stage 2 and inhale in stage 3.
Concentration: On the abdominal muscles.
Dynamic Application: Stages 2 and 3 should be alternately executed.
Static Application: Maintain the final attitude (stage 2) as per instruction.
Relaxation: After completion of the exercise, dynamic or static, relax in the sitting position with the legs extended forward and the arms by the sides.
Remark: Same as in Forward Head-bend Posture.

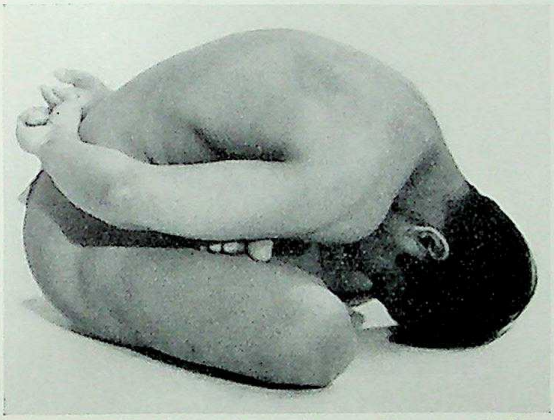


FIG. 19. Head-bend Lotus Posture (Yoga-mudrā).

5. *Head-bend Lotus Posture*

Stage 1: Assume Lotus Posture (Fig. 106) with the hands clasped behind the back, the body erect.
Stage 2: Bend the body forward and downward until the forehead touches the ground. Maintain the final attitude for a few seconds (Fig. 19).
Stage 3: Return to stage 1.
Breathing: Exhale in stage 2 and inhale in stage 3.
Concentration: On the abdominal muscles.
Dynamic Application: Stages 2 and 3 should be alternately executed.
Static Application: Maintain the final attitude (stage 2) as per instruction.
Relaxation: After completion of the exercise, dynamic or static, relax either in Lotus Posture or in the sitting position with the legs extended forward and the arms by the sides.

6. *Forward Body-bend Posture*

Stage 1: Sit with the legs extended sideward, the body erect, the arms stretched overhead.
Stage 2: Bend the body forward and downward until the trunk, head and arms touch the ground. Maintain the final attitude for a few seconds (Fig. 20).
Stage 3: Return to stage 1.
Breathing: Exhale in stage 2 and inhale in stage 3.
Concentration: On the abdominal muscles.
Dynamic Application: Stages 2 and 3 should be alternately executed.
Static Application: Maintain the final attitude (stage 2) as per instruction.
Relaxation: After completion of the exercise, dynamic or static, relax in the sitting position with the legs extended forward and the arms by the sides.
Remark: It is an advanced exercise. It requires extraordinary relaxation of the hamstring muscles and full flexibility at the hip joints to be able to extend the legs sideward. The beginner should try to go as far as possible.

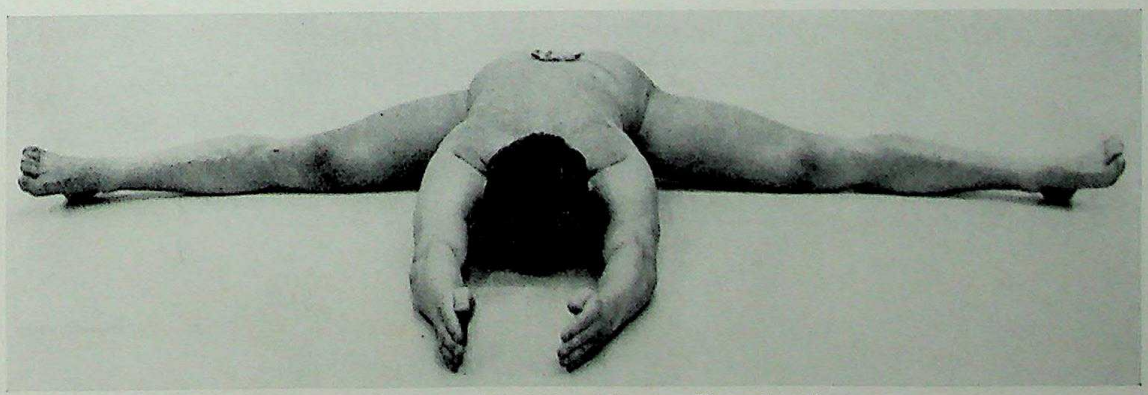


FIG. 20. Forward Body-bend Posture (Praṇatāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

7. *Foot-hand Posture*

Stage 1: Assume standing position with the heels together, the arms by the sides.

Stage 2: Bend the trunk forward and downward and at the same time extend the arms downward and hold either the big toes or all the toes of both feet with the hands. Finally, bend the head until the forehead touches the knees. The legs should be kept perfectly straight throughout the exercise. Maintain the final attitude for a few seconds (Fig. 21).

Stage 3: Return to stage 1.

Breathing: Exhale in stage 2 and inhale in stage 3.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Standing Posture.

Remark: After the movement is mastered, the head can be brought between the knees and projected beyond the legs (Fig. 21A). This requires great flexibility of the hip joints and relaxation of the hamstring muscles.

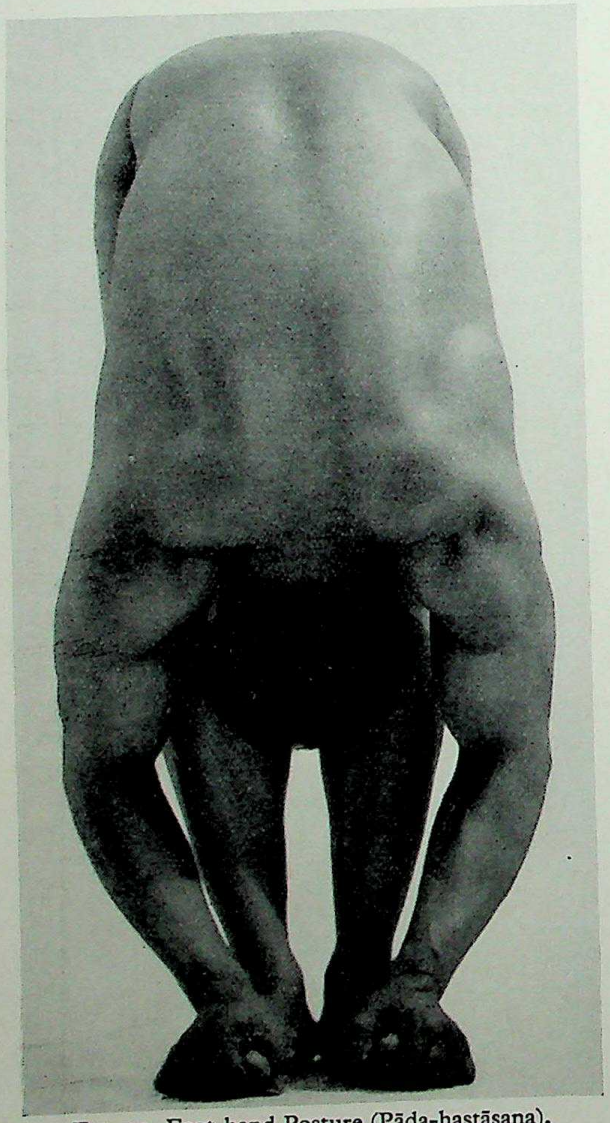


FIG. 21. Foot-hand Posture (Pāda-hastāsana).

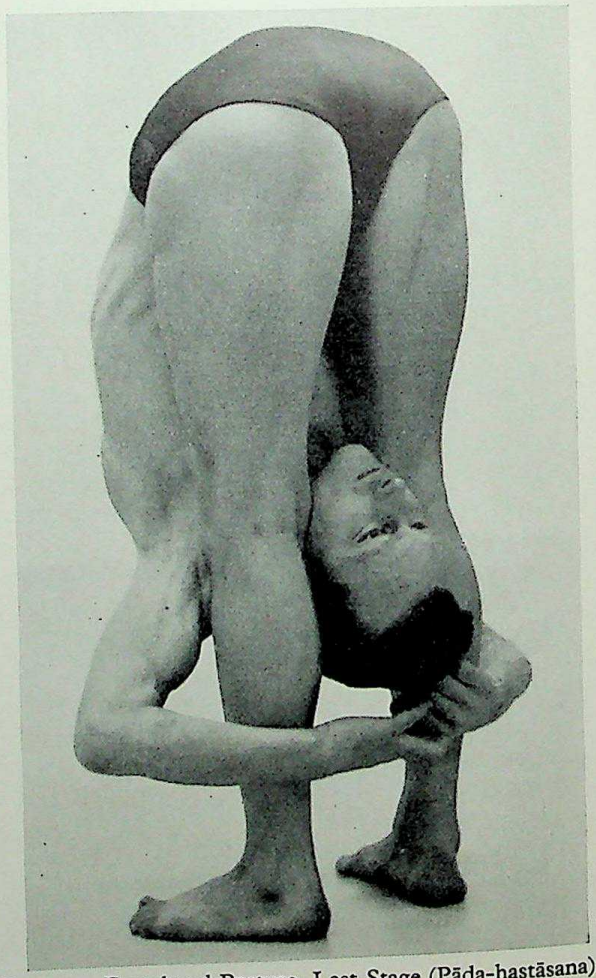


FIG. 21A. Foot-hand Posture, Last Stage (Pāda-hastāsana).

CC-0. Panini Digital Preservation Foundation, Chandigarh

FIG. 22. Semilunar Posture (Ardha Candrāsana).

Lateral Trunk-bend Posture Exercise

Both the spinal and abdominal muscles are alternately contracted and relaxed and stretched in the exercises presented here. The mind should be concentrated on the contracting muscles. The exercises are as follows:

1. *Semilunar Posture*

Stage 1: Assume standing position with the heels together, the arms extended overhead and the palms facing each other.

Stage 2: Bend the trunk from the hips laterally to the left side as much as possible. The legs should be kept straight and the positions of the arms and feet unchanged during the exercise. Avoid twisting the body. Maintain the final position for a few seconds (Fig. 22).

Stage 3: Return to stage 1.

Stage 4: Bend the trunk in a similar manner to the right side.

Stage 5: Return to stage 1.

Breathing: Either normal, or exhalation in stages 2 and 4 and inhalation in stages 3 and 5.

Concentration: On the spinal and abdominal muscles.

Dynamic Application: There are two forms: (*a*) From stage 2 to 3; now halt for a brief period: then recommence the movement from stage 4 to 5. Continue in this manner. (*b*) The continuous movement from 2 to 3, then 4 to 5. Breathing normal.

Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in Standing Posture.

2. *Hip-bend Posture*

Stage 1: Assume standing position with heels together, arms extended overhead and the palms facing each other.

Stage 2: Bend the trunk from the hips laterally to the left side until it is horizontal or almost horizontal. Keep the legs straight and the positions of the arms and feet unaltered during the exercise. Avoid twisting the body. Maintain the final attitude for a few seconds (Fig. 23).

Stage 3: Return to stage 1.

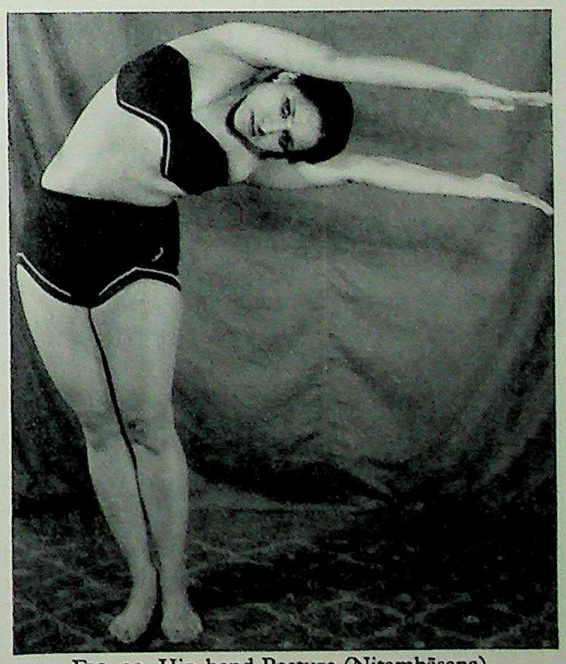


FIG. 23. Hip-bend Posture (Nitambāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 4: Bend the trunk in a similar manner to the right side.
Stage 5: Return to stage 1.
Breathing: As in Semilunar Posture.
Concentration: On the spinal and abdominal muscles.
Dynamic Application: As Semilunar Posture.
Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.
Relaxation: In Standing Posture after completion of the exercise.
Remark: This exercise improves the flexibility of the hip joints to a remarkable extent.

FIG. 24. Moon Posture (Candrāsana).

3. *Moon Posture*

Stage 1: Assume standing position with the legs far apart, the arms overhead.
Stage 2: Bend the trunk from the hips laterally to the right until you are able to hold the right ankle with your right hand, the right arm being extended downward and the left passing above the head, the left forearm bent at the elbow and projecting downward. Keep the legs perfectly straight and avoid twisting the body. Maintain the final position for a few seconds (Fig. 24).
Stage 3: Return to stage 1.
Stage 4: Bend the trunk in a similar manner to the left side.
Stage 5: Return to stage 1.
Breathing: As in Semilunar Posture.
Concentration: On the spinal and abdominal muscles.
Dynamic Application: As Semilunar Posture.
Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.
Relaxation: In Standing Posture after completion of the exercise.
Remark: This exercise develops the flexibility of the hip joints to a remarkable degree.

In these lateral trunk-bend posture exercises the dorso-lumbar junction and the lumbar spine are especially involved in the movements. So concentration on these parts may be applied while exercising. Also a torsion occurs in these parts of the spine in these exercises. But twisting the body while doing the exercises should be avoided as much as possible. There is a strong tendency to twist the trunk in Hip-bend Posture and Moon Posture. The increased flexibility and muscular control will enable a student to perform these exercises correctly.

Trunk-twist Posture Exercise

In trunk-twist posture exercises both the spinal and abdominal muscles are involved. The spinal muscles (except the sacrospinalis) and the obliquus externus abdominis of the left side and the sacrospinalis (thoracic and lumbar portions) and the obliquus internus abdominis of the right side are contracted in the trunk-twist posture exercise when done to the right and vice versa. In the trunk-twist posture exercise the thoracic spine is principally involved. The movement is very limited in the lumbar spine. Concentration should be applied to the thoracic region. The twisting movement is associated with a slight lateral flexion to the same side. It is a very common tendency to go beyond this point. This should be carefully avoided.

The following are the exercises:

1. *Twist Posture*

Stage 1: Sit erect with the legs extended in front and far apart, the hands folded at the chest.
Stage 2: Twist the trunk to the left as much as possible without changing the position of the legs and without raising them off the floor.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Avoid lateral flexion as much as possible. Maintain the final attitude for a few seconds (Fig. 25).

Stage 3: Return to stage 1.

Stage 4: Twist the trunk in a similar manner to the right.

Stage 5: Return to stage 1.

Breathing: Either normal, or inhalation in stages 2 and 4 and exhalation in stages 3 and 5.

Concentration: On the spinal and the abdominal muscles.

Dynamic Application: Either (*a*) stages 2 and 3, halt, and stages 4 and 5, or (*b*) the continuous movement from 2 to 3 and 4 to 5 with normal breathing.

Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.

Relaxation: After completion of the exercise, dynamic or static, relax in the sitting position with the legs extended forward and the arms by the sides.

Remark: This exercise can also be performed in the standing position with the hands folded at the chest.

2. *Modified Spine-twist Posture*

Stage 1: Sit erect with the legs extended in front.

Stage 2: Put the right heel against the perineum, bending the leg at the knee with the right thigh on the ground. Now bring the left leg to the right side of the right knee with the left knee elevated and the left foot placed flat on the ground and close to the right side of the right knee. Then twist the body to the left as much as possible, place firmly the right armpit against the left side of the elevated knee with the right arm extended downward, holding the left big toe with the right hand. Swing the left arm to the right side behind the back and place the left hand on the right groin. Finally twist the head to the left side, bringing the chin in line with the left shoulder. Maintain the final attitude for a few seconds (Fig. 26).

Stage 3: Return to stage 1.

Stage 4: Twist the body in a similar manner to the right.

Stage 5: Return to stage 1.

Breathing: Normal.

Concentration: On the spinal and abdominal muscles.

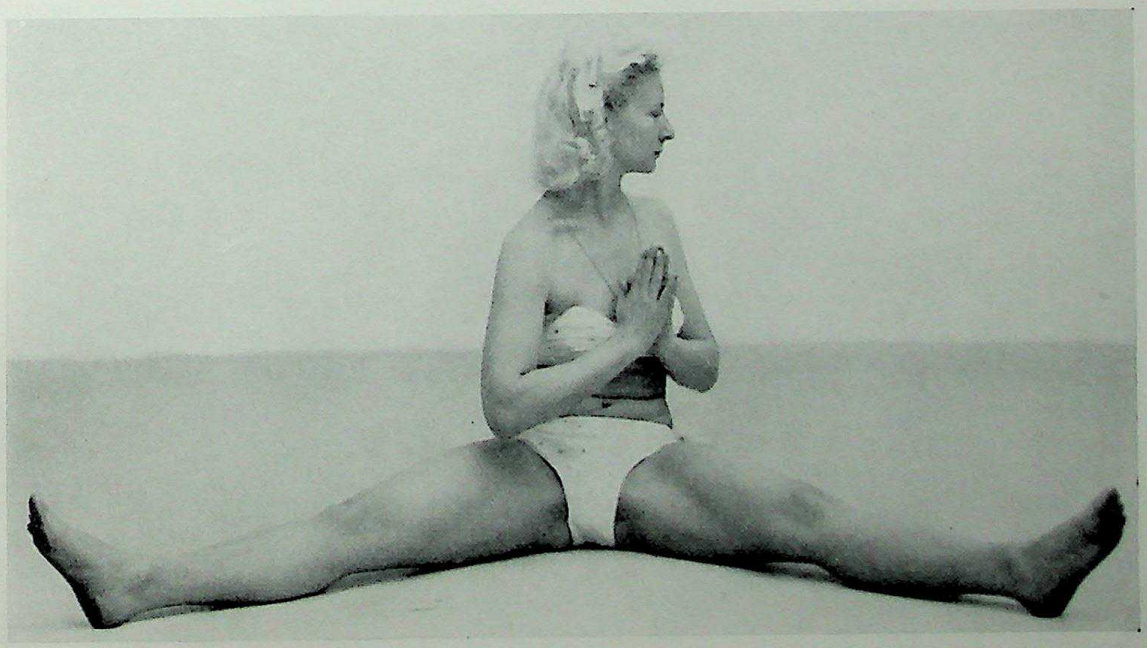


FIG. 25. Twist Posture (Vakrāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.

Relaxation: In the sitting position with the legs extended forward and the arms by the sides after completion of the exercise.

Remark: Attention should be given to the twisting of the body to the maximum limit. The latissimus dorsi muscle comes into play in this exercise.

3. *Ankle-hold Modified Spine-twist Posture*

Stage 1: Sit erect with the legs extended in front.

Stage 2: Put the left heel against the perineum, bending the leg at the knee, with the left thigh on the ground. Now bring the right leg to the left side of the left thigh and place the right foot flat on the ground close to the left hip, with the right knee elevated. Then twist the body to the right as much as possible, place firmly the left armpit against the right side of the elevated knee with the left arm extended downward, holding the left knee by the left hand. Swing the right arm to the left side behind the back and hold the right ankle with the right hand. Finally twist the head to the right, bringing the chin in line with the right shoulder. Maintain the final attitude for a few seconds (Figs. 27 and 28).

FIG. 26. Modified Spine-twist Posture (Ardha Matsyendrāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

FIG. 27. Ankle-hold Modified Spine-twist Posture, Front View (Baddha Ardha Matsyendrāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 3: Return to stage 1.

Stage 4: Twist the body in a similar manner to the left side.

Stage 5: Return to stage 1.

Breathing: Normal.

Concentration: On the spinal and abdominal muscles.

FIG. 28. Ankle-hold Modified Spine-twist Posture, Back View (Baddha Ardha Matsyendrāsana).

Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.

Relaxation: In the sitting position with the legs extended forward and the arms by the sides after completion of the exercise.

Remark: Same as in Modified Spine-twist Posture.

4. *Spine-twist Posture.*

Stage 1: Sit erect with the legs extended in front.

Stage 2: Place the left foot on the right hip joint with the help of your hands, the left heel pressing against the abdomen and the left thigh on the floor. Now bring the right leg to the left side of the left knee with the right knee elevated and the right foot placed flat on the floor close to the left side of the left knee. Then twist the body as much as possible to the right side, place firmly the left armpit against the right side of the elevated knee with the left arm extended downward, holding the right big toe with the left hand. Swing the right arm to the left side behind the back and grasp the heel of the left foot with the right hand. Finally, twist the head to the right side, bringing the chin in line with the right shoulder. Maintain the final attitude for a few seconds (Fig. 29).

Stage 3: Return to stage 1.

FIG. 29. Spine-twist Posture (Matsyendrāsana).

Stage 4: Twist the body in a similar manner to the left side.

Stage 5: Return to stage 1.

Breathing: Normal.

Concentration: On the spinal and abdominal muscles.

Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.

Relaxation: In the sitting position with the legs

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

extended in front and the arms by the sides after completion of the exercise.

Remark: The latissimus dorsi muscle comes strongly into play in this exercise. It is an advanced spinal exercise. Spine-twist Posture transformed into Ankle-hold Spine-twist Posture causes full contraction of those muscles involved in Spine-twist Posture. A student is advised to practise this exercise for the greater muscular development (Fig. 29A).

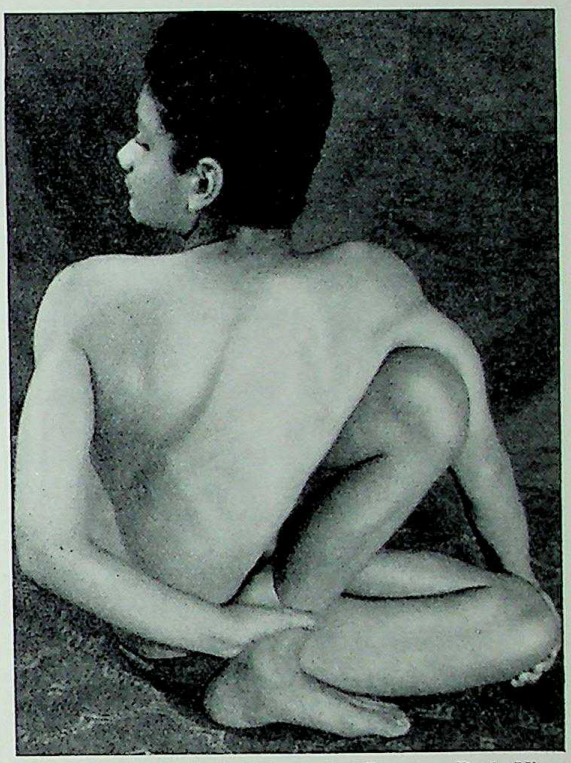


FIG. 29A. Ankle-hold Spine-twist Posture, Back View (Baddha Matsyendrāsana).

5. *Sideward Head-bend Posture*

Stage 1: Sit erect with the legs extended in front and far apart, the hands clasped behind the back.

Stage 2: Now twist the body to the left and bend the head to the floor close to the outer side of the left leg, without changing the position of the legs and without raising them off the floor. Maintain the final attitude for a few seconds (Fig. 30).

Stage 3: Return to stage 1.

Stage 4: Twist the body and bend the head in a similar manner to the right side.

Stage 5: Return to stage 1.

Breathing: Normal.

Concentration: On the spinal and the abdominal muscles.

Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.

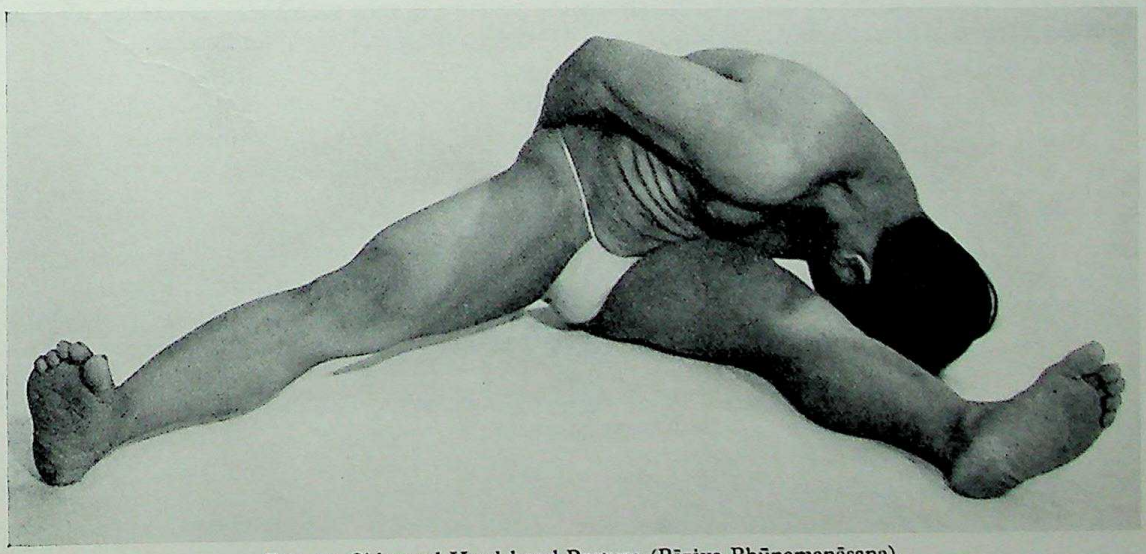


FIG. 30. Sideward Head-bend Posture (Pārśva Bhūnamanāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

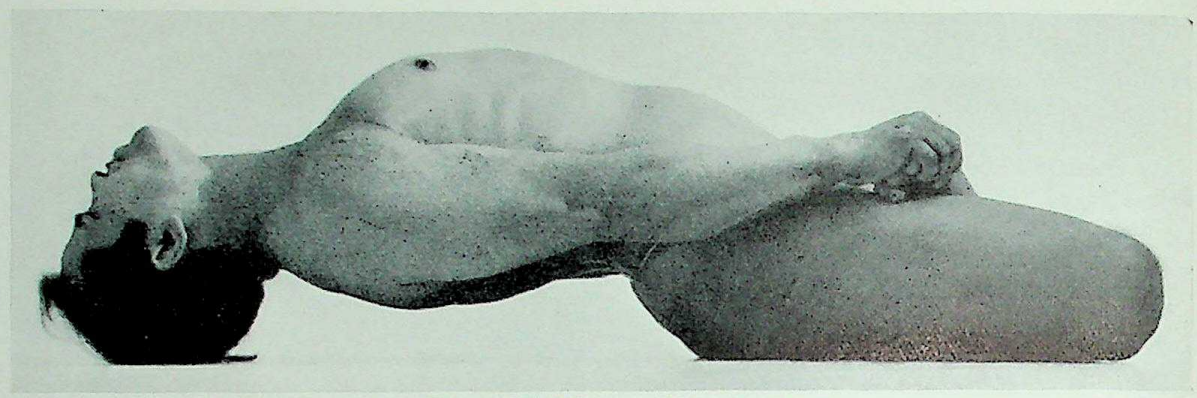


FIG. 31. Fish Posture (Matsyāsana).

Relaxation: In the sitting position with the legs extended in front and the arms by the sides after completion of the exercise.

Remark: This exercise is actually a combination of the twisting and the lateral bending movements.

Supplementary Spinal Posture Exercise

1. *Fish Posture*

Stage 1: Assume Lotus Posture (Fig. 106).

Stage 2: Lie on your back, lifting the knees vertically at the same time.

Stage 3: Lower the legs on to the floor and arch the spine as much as possible by placing the elbows by your sides on the floor and bending the head backward in such a way as to cause the crown of the head to rest on the floor. Finally, extend the arms and hold the big toes or all the toes with the hands. Now the trunk is supported by the vertex and the buttocks. Maintain the final attitude for a few seconds (Fig. 31).

Stage 4: Return to stage 2.

Breathing: Normal.

Concentration: On the spinal and back muscles.

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Maintain the final attitude (stage 3) as per instruction.

Relaxation: Relax in Corpse Posture after completion of the exercise.

Remark: It is a posterior trunk-bend posture exercise more suitable for static application. It causes the stretching of the neck and therefore its practice is very useful after all contractile neck movements and Shoulder Posture.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XIV

Neck Posture Exercise

THE neck posture exercise is an inseparable part of the spinal exercise. In this form of exercise the cervical spine and the muscles connected to it are involved. The neck posture exercise consists of anterior, posterior and lateral neck-bend posture exercise and neck-twist posture exercise.

In the anterior neck-bend posture exercise, the sternocleidomastoideus, platysma, longus capitis and colli, rectus capitis anterior and lateralis, scalenus anterior, medius and posterior, and the supra- and infra-hyoid muscles are involved. In the posterior neck-bend posture exercises, the sacrospinalis (cervical part), semispinalis capitis and cervicis, splenius capitis and cervicis, multifidus (cervical part), interspinalis (cervical part), the suboccipitals and trapezius (upper) are brought into play.

The following muscles are involved in lateral neck-bend posture exercise: the scalenus anterior, medius and posterior, splenius capitis and cervicis, rectus capitis lateralis, sacrospinalis (cervical part), semispinalis (cervical part), intertransversarii, longus colli, suboccipitals and sternocleidomastoideus. The sacrospinalis (cervical part), semispinalis capitis, splenius capitis and cervicis, multifidus (cervical part), suboccipitals and sternocleidomastoideus are involved in neck-twist posture exercise. The mind should be concentrated on the contracting muscles.

There are various posture exercises in which flexion, extension, lateral flexion and rotation of the cervical spine (neck) takes place. In most of the posture exercises the neck movement is combined with the movements of the other parts of the body. In voluntary contraction motion the neck movements are isolated from movements of other parts of the body. They are termed voluntary contraction neck motion. It consists of four main neck exercises: neck flexion exercise, neck extension exercise, lateral neck flexion exercise and neck rotation exercise. These may be called the preliminary neck exercise. The advanced form of neck exercise in which the muscles are more powerfully brought into play is found in some special neck posture exercises. Both the preliminary and advanced exercises are presented here.

1. *Neck Flexion-extension*

Stage 1: Assume Accomplished Posture (Fig. 105) with the arms by the sides.

Stage 2: Bend the head forward until the chin touches the top of the sternum (breast bone), contracting voluntarily the neck muscles.

Stage 3: From stage 2 return to stage 1 without contracting the neck muscles and then bend the head backward to some extent.

Breathing: Normal.

Concentration: On the neck muscles.

Relaxation: In Accomplished Posture after completion of the exercise.

Remark: This exercise can also be done in Standing Posture. It is not a posture exercise but a contraction exercise.

2. *Neck Rotation*

Stage 1: Assume Accomplished Posture (Fig. 105) with the arms by the sides.

Stage 2: Twist the head to the right and left, contracting the neck muscles.

Breathing: Normal.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Concentration: On the neck muscles.
Relaxation: In Accomplished Posture after completion of the exercise.
Remark: As in Neck Flexion-extension.

3. *Lateral Neck Flexion*

Stage 1: Assume Accomplished Posture (Fig. 105) with the arms by the sides.
Stage 2: Bend the head laterally towards the right and left shoulders alternately.
Breathing: Normal.
Concentration: On the neck muscles.
Relaxation: In Accomplished Posture after completion of the exercise.
Remark: As in Neck Flexion-extension.

4. *Neck Posture*

Stage 1: Assume the kneeling position with the hands on the floor. Now bend the head to the floor and support the body on the head and toes of both feet with the face inward, hips well up, the hands behind the back.
Stage 2: Bend the head backward and forward (Fig. 32).

Breathing: Normal.
Concentration: On the neck muscles.
Relaxation: In Prone-lying Posture or Corpse Posture after completion of the exercise.
Remark: It is an advanced neck exercise. When utilizing it as a static exercise, one should adopt only the stage 1. The head should rest on a thick cushion.

5. *Neck-bridge Posture*

Stage 1: Assume supine-lying position with the forearms crossed at the chest and the heels drawn to the buttocks, bending the legs at the knees.
Stage 2: Raise the body upward into a bridge position, supporting it on the head and feet. Maintain the final attitude for a few seconds (Fig. 33).
Stage 3: Lower the body to stage 1.
Breathing: Inhale in stage 2 and exhale in stage 3.
Concentration: On the neck muscles.
Dynamic Application: Stages 2 and 3 should be alternately executed.
Static Application: Maintain the final attitude (stage 2) as per instruction.
Relaxation: In Corpse Posture after completion of the exercise.
Remark: It is an advanced neck exercise.

Supplementary Neck Posture Exercise

1. *Chin-lock Act*

Stage 1: Assume a folded-legged posture.
Stage 2: Bend the head forward and downward and place the chin tightly against the top of the

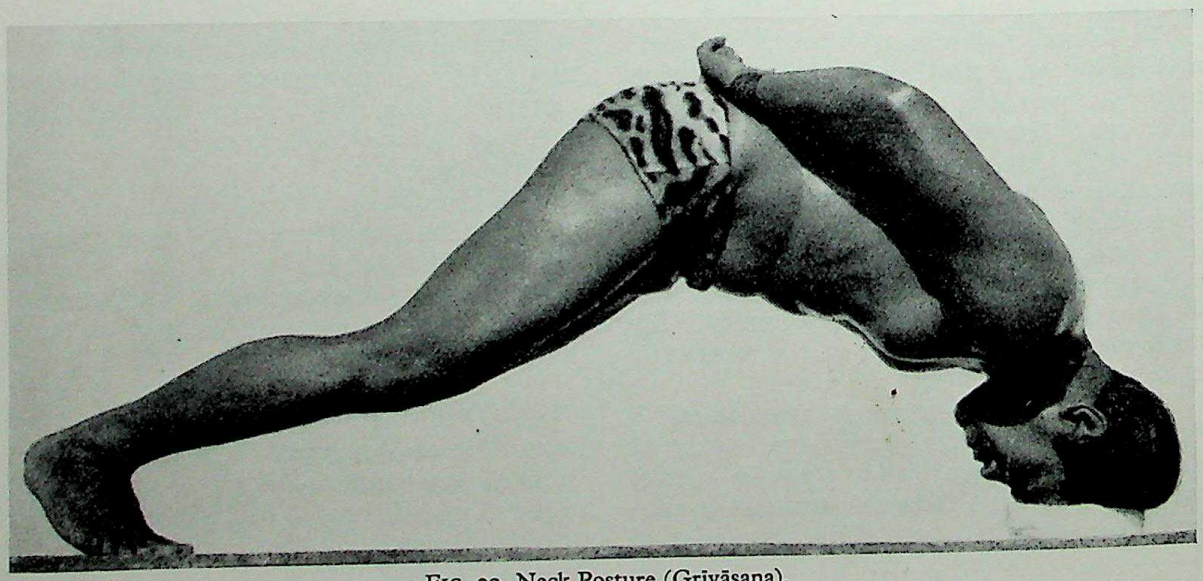


FIG. 32. Neck Posture (Grīvāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

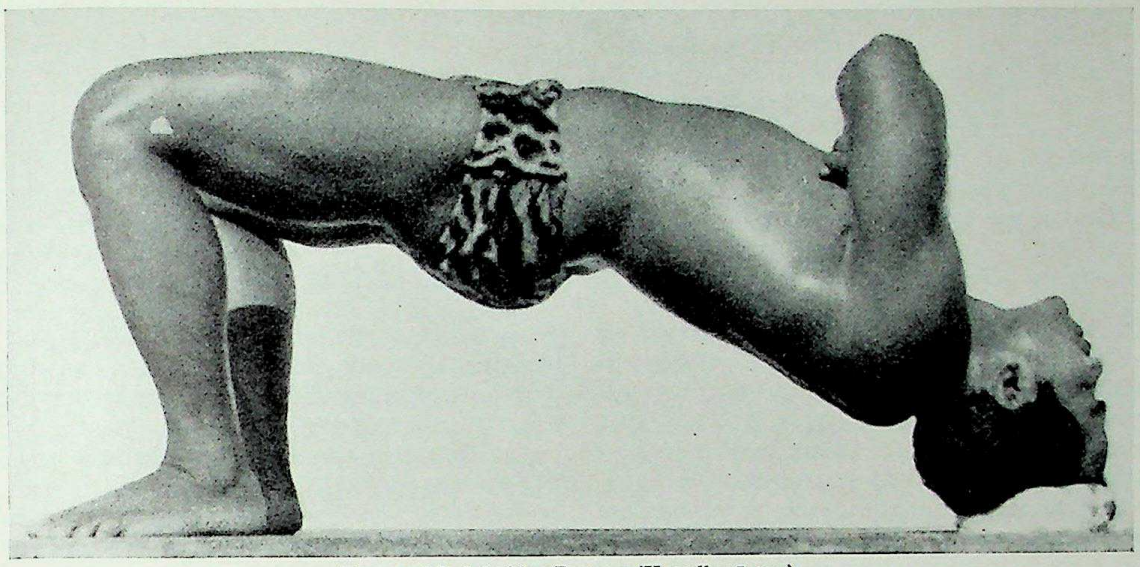


FIG. 33. Neck-bridge Posture (Kaṃdharāsana).

sternum (breast bone). Maintain the final attitude for a few seconds.

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the neck muscles.

Dynamic Application: Not necessary.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In a folded-legged posture.

Remark: It is essentially for static application.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XV

Abdominal Posture Exercise

In abdominal exercise the abdominal muscles are actively brought into play and are properly developed. In Yoga the right abdominal development is a most important factor. It is associated with breath-control and internal purificatory processes and is a great help in prolonged concentration postures when it is necessary to maintain the abdominal viscera in right positions, thus protecting them from being subject to direct gravitational stress. Abdominal protuberance is mainly due to abdominal muscular weakness. Abdominal weakness also causes lumbar lordosis and an anterior pelvic displacement.

Abdominal exercise increases the tone and strength of the abdominal muscles and prevents abdominal protuberance and fat accumulation in the abdominal and pelvic regions. The inactive blood accumulating in the abdominal area is forced into the general circulation. A high order of the functional efficiency of the alimentary canal depends to a very great extent upon the abdominal development.

Abdominal Exercise Classified

In Yoga abdominal exercise is divided into two groups: abdominal posture exercise and abdominal control exercise. The abdominal posture exercise is subdivided into trunk-raise posture exercise, pelvis-raise posture exercise, trunk-leg-raise posture exercise and leg-raise posture exercise. The trunk-raise posture exercise, again, is classified into anterior trunk-raise posture exercise, oblique trunk-raise posture exercise and lateral trunk-raise posture exercise. Trunk-leg-raise posture exercise is also classified into anterior trunk-leg-raise posture exercise and lateral trunk-leg-raise posture exercise.

The anterior trunk-raise posture exercise consists of two parts: trunk flexion on the pelvis and pelvis flexion on the thighs. First flexion of the trunk takes place in which the sternum and the pubis are approximated. In the trunk flexion movement the rectus abdominis and the obliquus internus abdominis are chiefly brought into play. The exercise is completed by flexion of the pelvis on the thighs which is accomplished by the hip flexors. Just before the beginning of the flexion of the pelvis, the obliquus externus abdominis comes into play. In oblique trunk-raise posture exercise the obliquus externus abdominis and obliquus internus abdominis come strongly into action. In the lateral trunk-raise posture exercise the same muscles are brought into action. In pelvis-raise posture exercise the rectus abdominis is principally brought into play.

Leg-raise posture exercise is actually hip flexion. The leg raising is accomplished by the hip flexors. The rôle of the rectus abdominis is to flatten the lumbar spine by exerting an upward pull on the pelvis against the downward pull of the leg and maintain the upward pull. The rectus abdominis is assisted by the obliquus externus abdominis and obliquus internus abdominis. When the abdominal muscles are weak, hyperextension of the lumbar spine takes place and the abdominal muscles are in a stretched state. This is an unfavourable condition for the abdominal muscles. If hyperextension of the lumbar spine cannot be prevented during double leg raising exercise, the abdominal muscular strength should be first increased by trunk raising exercise. However, when the hyperextension is controlled, leg-raise posture exercise becomes very helpful in abdominal development. In fact, leg-raising posture exercise is the supplementary abdominal exercise, and when both trunk-raise and leg-raise exercises are combined, very satisfactory results are obtained. The leg-raising exercises are contraindicated in cases of lordosis.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

In trunk-leg-raise posture exercise the abdominal muscles are actively employed.

Anterior Trunk-raise Posture Exercise

1. *Spine Posture*

Stage 1: Assume supine-lying position with the arms extended overhead, the heels together, the head between the arms.

Stage 2: Raise the body slowly to a sitting position, first by raising the head, then the shoulders and then the entire trunk. The whole range of movement is continuous, slow and without any jerk. The head will remain between the arms during the movement (Fig. 34).

Stage 3: From the sitting position return to stage 1.

Breathing: Either normal, or inhalation in stage 3 and exhalation in stage 2.

Concentration: On the abdominal muscles, especially the rectus abdominis.

Dynamic Applications: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the trunk attitude just at the point when flexion of the pelvis on the thighs commences, as per instruction. It is when the 7th cervical vertebral region is raised about 8 inches off the floor.

Relaxation: In Corpse Posture after completion of the exercise.

2. *Spine Posture with Hands Clasped behind Head*

Stage 1: Assume supine-lying position with the hands clasped behind the head, the heels together.

Stage 2: Raise the body slowly to a sitting position in a continuous movement without any jerk.

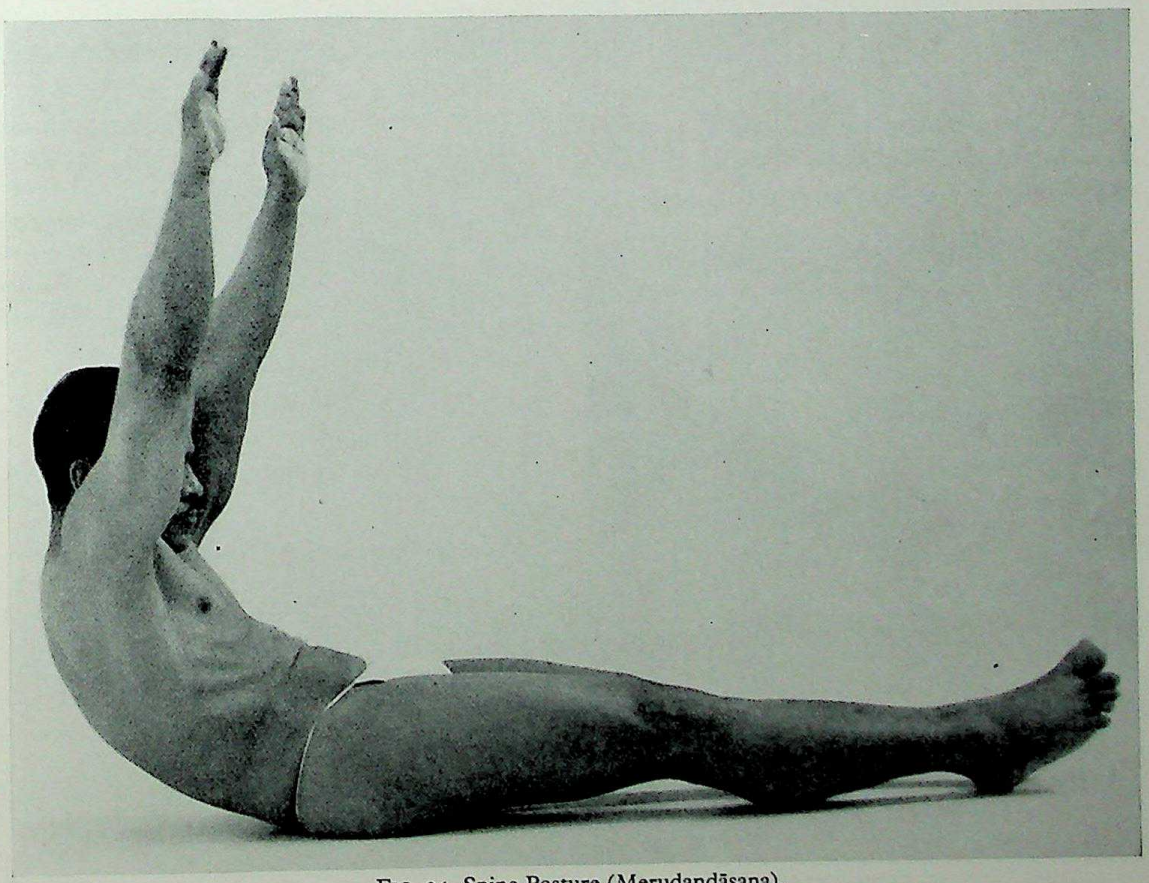


FIG. 34. Spine Posture (Merudaṇḍāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Concentration: On the abdominal muscles, especially the rectus abdominis.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the trunk attitude at the point when flexion of the pelvis on the thighs is initiated (see Fig. 35).

Relaxation: In Corpse Posture after completion of the exercise.

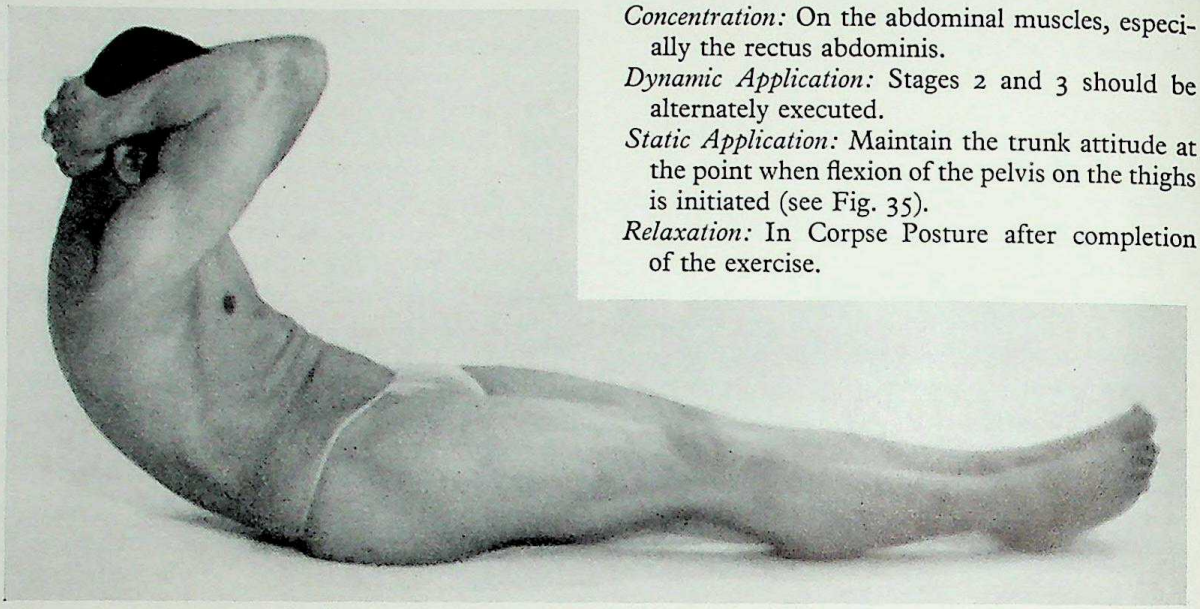


FIG. 35. Spine Posture with hands clasped behind head (Śirahasta Merudaṇḍāsana).

The position of the hands should not change and the legs should not be lifted off the floor during the movement (Fig. 35).

Stage 3: From the sitting position return to stage 1.

Breathing: Either normal, or inhalation in stage 3 and exhalation in stage 2.

3. *Spine Posture with Forearms Locked behind Head*

Stage 1: Assume supine-lying position with the forearms locked behind the head, the heels together.

Stage 2: Raise the trunk slowly to a sitting position in a continuous movement without any jerk. The position of the forearms should not change and the legs should not be lifted off the floor during the movement (Fig. 36).

Stage 3: From the sitting position return to stage 1.

Breathing: Either normal, or inhalation in stage 3 and exhalation in stage 2.

Concentration: On the abdominal muscles, especially the rectus abdominis.

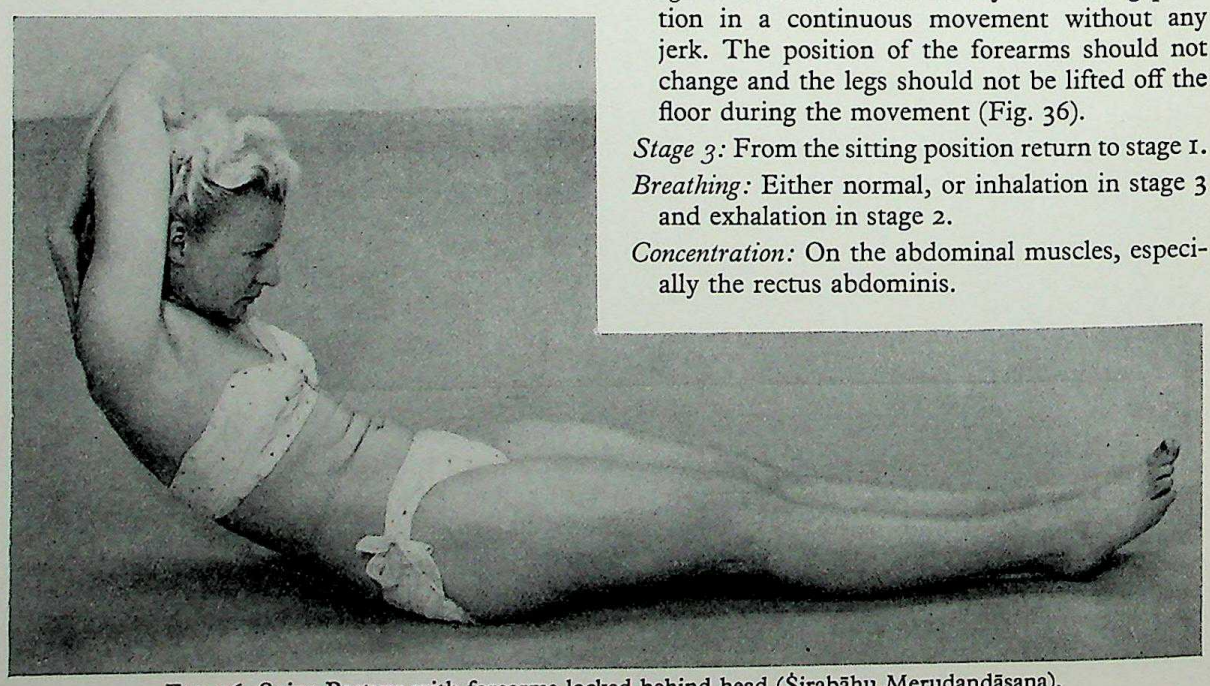


FIG. 36. Spine Posture with forearms locked behind head (Śirabāhu Merudaṇḍāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the trunk attitude at the point when flexion of the pelvis on the thighs is initiated (see Fig. 36).

Relaxation: In Corpse Posture after completion of the exercise.

4. *Risen Balance Posture*

Stage 1: Assume Lotus Posture (Fig. 106).

Stage 2: Lie on your back with the legs placed on the floor, the arms extended upward.

Stage 3: Raise the body slowly to a sitting position without jerk (Fig. 37).

Stage 4: From the sitting position return to stage 2.

Breathing: Normal.

Concentration: On the abdominal muscles, especially the rectus abdominis.

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Not suitable.

Relaxation: In Corpse Posture after completion of the exercise.

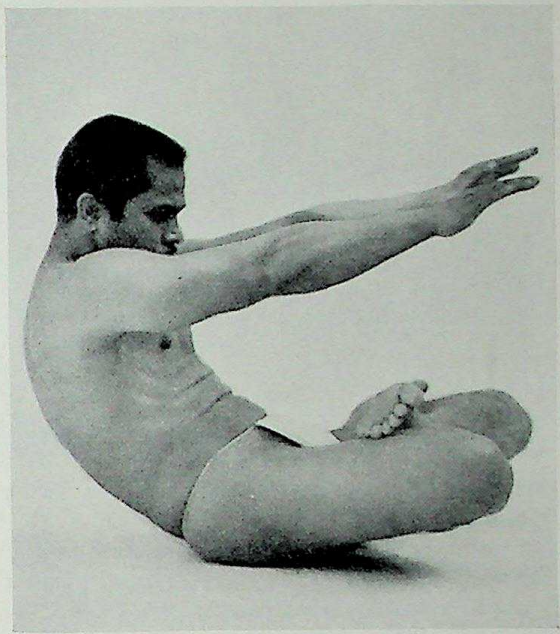


FIG. 37. Risen Balance Posture (Utthita Tolāṅgulāsana).

Remark: This is an advanced form of abdominal exercise designed to strengthen the abdominal muscles to a high degree.

Oblique Trunk-raise Posture Exercise

1. *Oblique Spine Posture*

Stage 1: Assume supine-lying position with the arms extended overhead, the heels together, the head between the arms.

Stage 2: Raise the body slowly to a sitting position while twisting it to the right. The movement should be diagonal, continuous and without any jerk. The head will remain between the arms and the legs should not be lifted off the floor during the movement (Fig. 38).

Stage 3: From the sitting position return to stage 1.

Stage 4: Raise the body to a sitting position in a similar way (stage 2) to the left.

Stage 5: Return to stage 1.

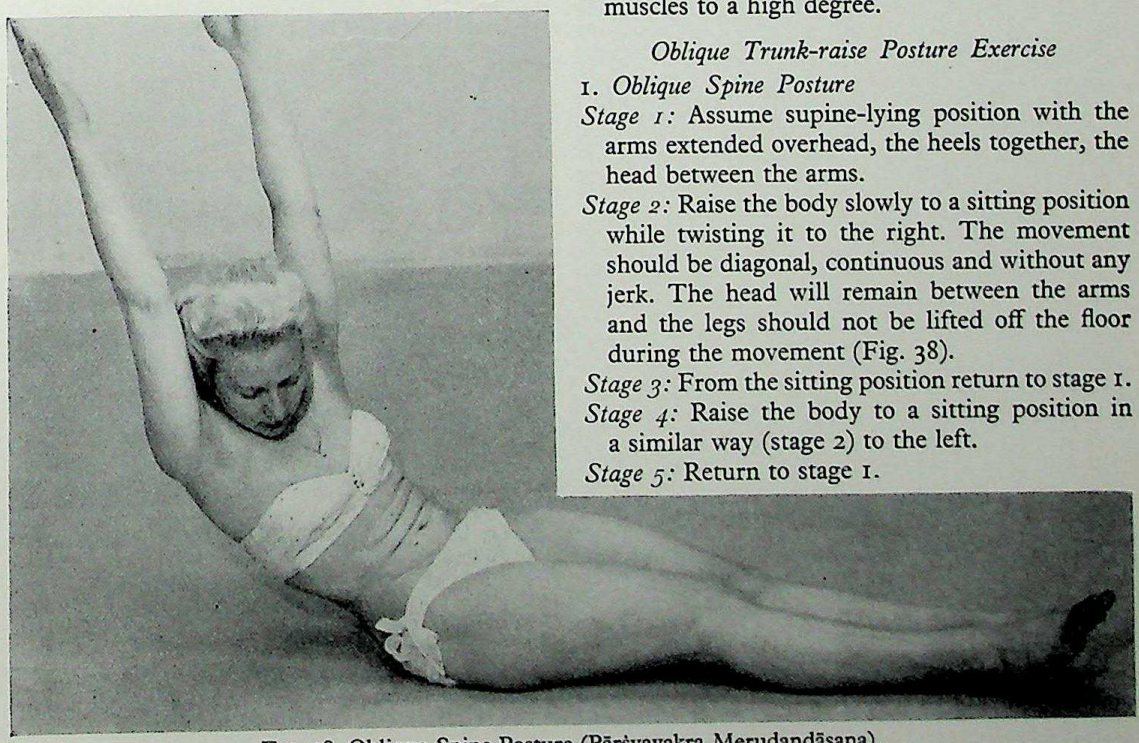


FIG. 38. Oblique Spine Posture (Pārśvavakra Merudaṇḍāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

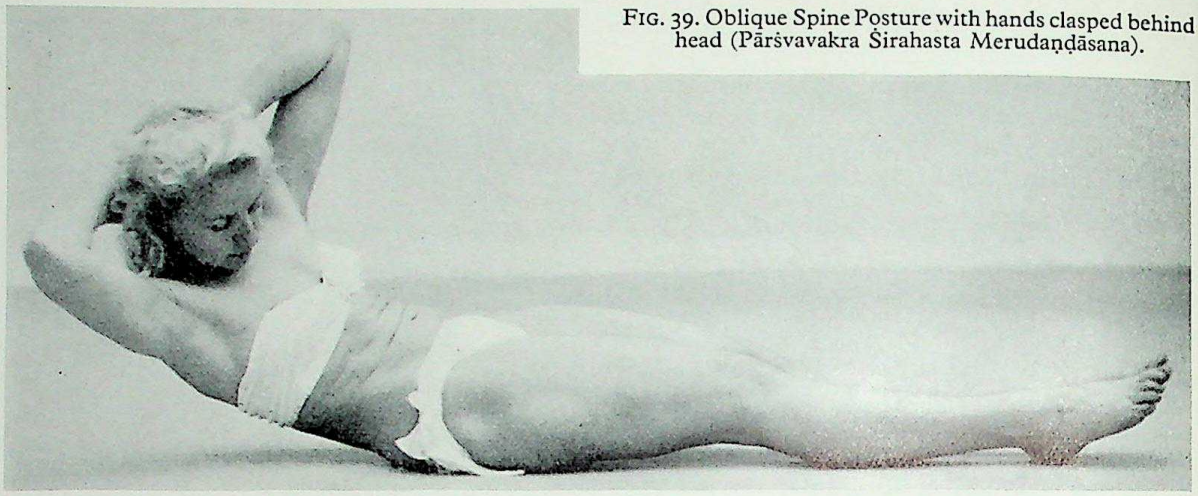


FIG. 39. Oblique Spine Posture with hands clasped behind head (Pārśvavakra Śirahasta Merudaṇḍāsana).

Breathing: Normal, or inhale in stages 3 and 5 and exhale in stages 2 and 4.

Concentration: On the obliquus externus abdominis.

Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.

Static Application: Not suitable.

Relaxation: In Corpse Posture after completion of the exercise.

2. *Oblique Spine Posture with Hands Clasped behind Head*

Stage 1: Assume supine-lying position with the hands clasped behind the head, the heels together.

Stage 2: Raise the body slowly to a sitting position while twisting it to the right. The movement should be diagonal, continuous and without any jerk. The positions of the hands will remain unchanged and the legs should not be lifted off the floor during the movement (Fig. 39).

Stage 3: From the sitting position return to stage 1.

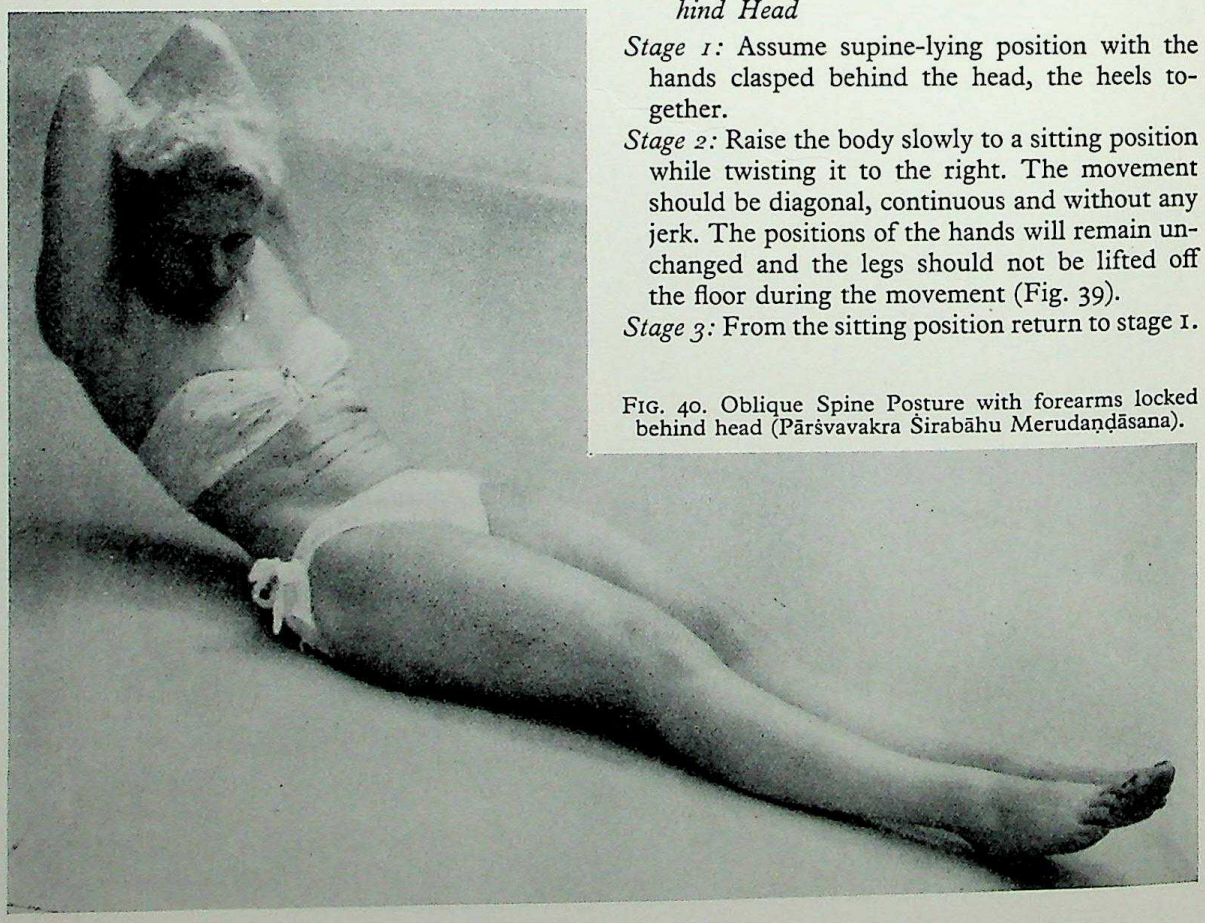


FIG. 40. Oblique Spine Posture with forearms locked behind head (Pārśvavakra Śirabāhu Merudaṇḍāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 4: Raise the body to a sitting position in a similar way (stage 2) to the left.
Stage 5: Return to stage 1.
Breathing: Normal, or inhale in stages 3 and 5 and exhale in stages 2 and 4.
Concentration: On the obliquus externus abdominis.
Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.
Static Application: Not suitable.
Relaxation: In Corpse Posture after completion of the exercise.

3. *Oblique Spine Posture with Forearms Locked behind Head*

Stage 1: Assume supine-lying position with the forearms locked behind the head, the heels together.
Stage 2: Raise the body slowly to a sitting position while twisting it to the right. The movement should be diagonal, continuous and without any jerk. The positions of the forearms will remain unchanged and the legs should not be lifted off the floor during the movement (Fig. 40).
Stage 3: From the sitting position return to stage 1.
Stage 4: Raise the body to a sitting position in a similar way (stage 2) to the left.
Stage 5: Return to stage 1.
Breathing: Normal, or inhale in stages 3 and 5 and exhale in stages 2 and 4.
Concentration: On the obliquus externus abdominis.
Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.
Static Application: Not suitable.
Relaxation: In Corpse Posture after completion of the exercise.

Lateral Trunk-raise Posture Exercise

1. *Lateral Spine Posture*

Stage 1: Assume right side-lying position with the trunk, pelvis and legs in a straight line, the left arm extended downward along the left side and on the left thigh, the right forearm locked behind the right side of the head.
Stage 2: Raise the head and the trunk laterally until the whole trunk is lifted off the floor. The locked forearm will be raised along with the head. The movement is to be executed slowly and without raising the legs off the floor (Fig. 41).
Stage 3: Return to stage 1.
Stage 4: Assume left side-lying position in the same manner as in stage 1.
Stage 5: Raise the trunk laterally in a similar way (stage 2).
Stage 6: Return to stage 4.
Breathing: Normal.
Concentration: On the obliquus externus and internus abdominis.
Dynamic Application: Stages 2 and 3 should be alternately executed. The same applies to stages 5 and 6.
Static Application: Not suitable.
Relaxation: In Corpse Posture after completion of the exercise.

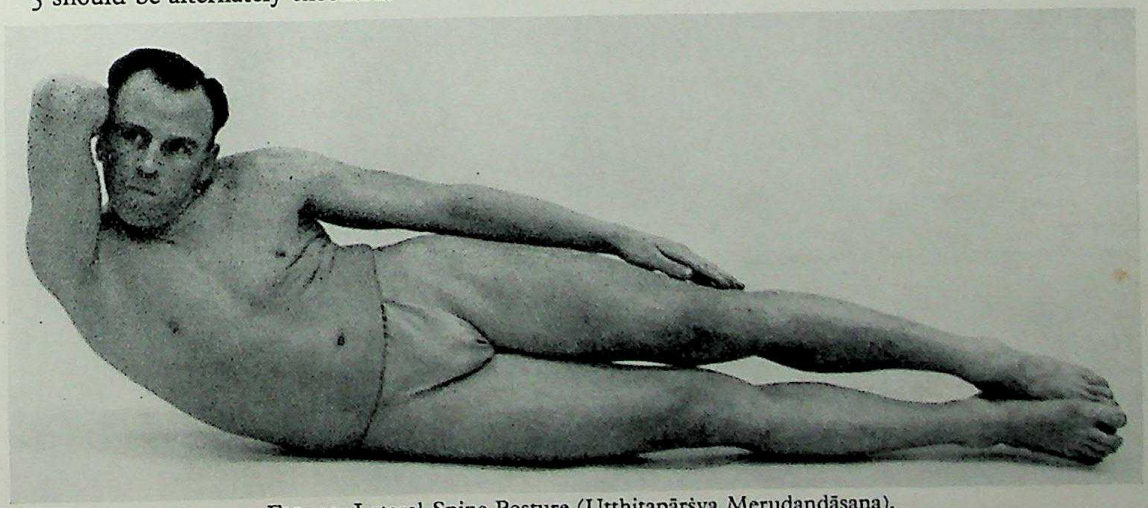


FIG. 41. Lateral Spine Posture (Utthitapārśva Merudaṇḍāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

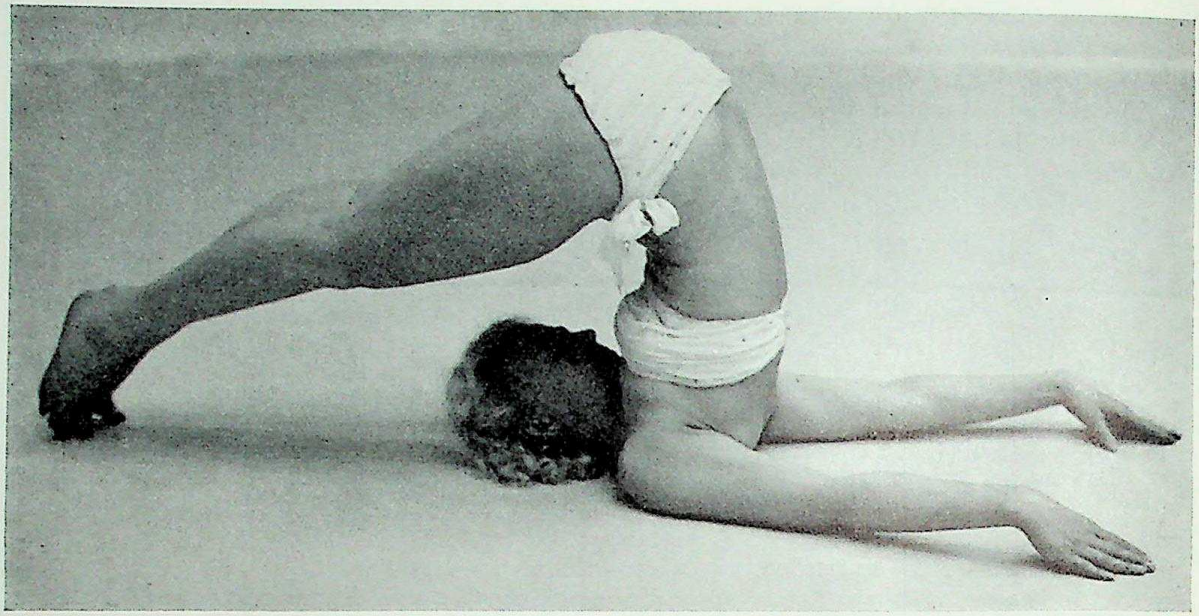


FIG. 42. Plough Posture (Halāsana).

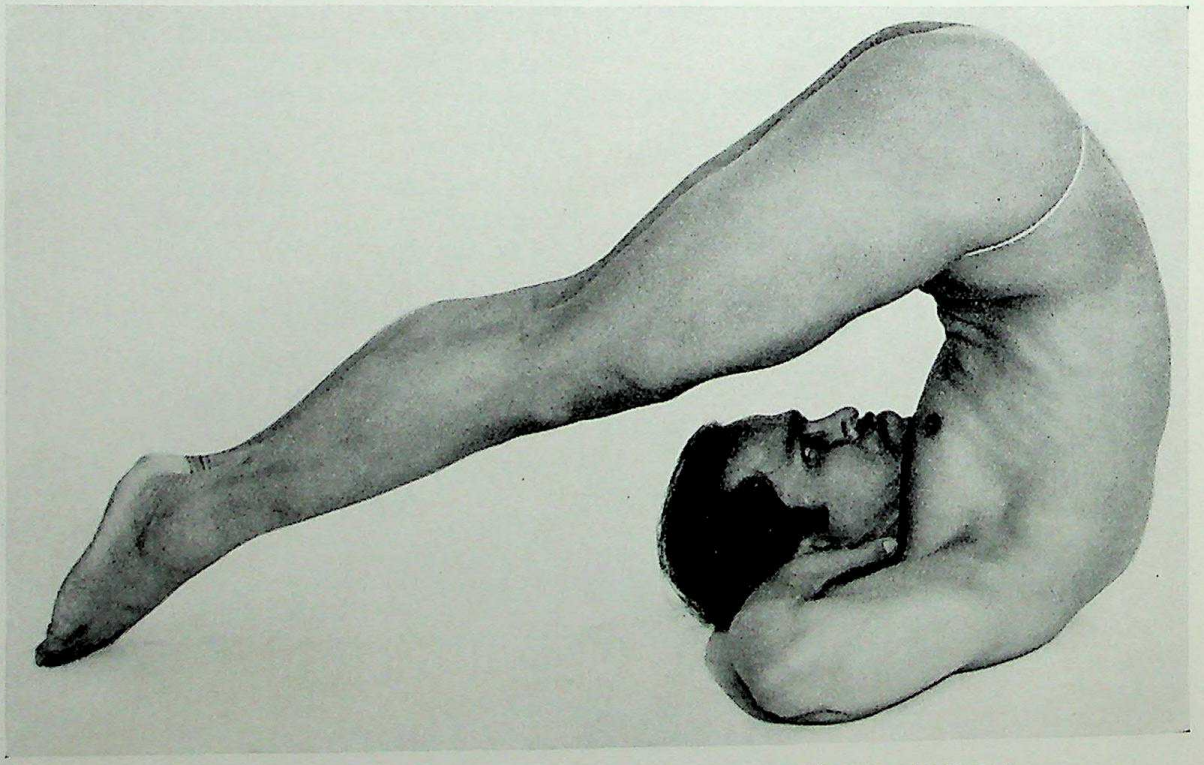


FIG. 42A. Plough Posture with forearms locked behind head (Śirabāhu Halāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Remark: An attempt will be made to avoid twisting the body as much as possible while raising the trunk. This is an advanced exercise requiring powerful muscular contraction. It is desirable to practise this exercise at first with the legs supported or stabilized by an assistant.

Pelvis-raise Posture Exercise

1. *Plough Posture*

Stage 1: Assume supine-lying position with the legs extended, the feet together, the arms extended by the sides.

Stage 2: Raise slowly the legs, pelvis and trunk, stage by stage, until the body is vertical. At this point do not stop but continue the movement by carrying the legs beyond the head and making the toes touch the floor. The whole range of movement from raising the legs off the floor to touching the floor beyond the head with the toes should be continuous, without any break at any step. The movement should be done without any jerk and the legs should be kept close to each other and unbent throughout the movement. After the toes touch the floor, try to push the toes still further from the head. Maintain the final attitude for a few seconds (Fig. 42).

Stage 3: Return to stage 1 without any jerky movement and without bending the legs.

Breathing: Normal, or exhale in stage 2 and inhale in stage 3.

Concentration: On the abdominal muscles, especially the rectus abdominis.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Corpse Posture after completion of the exercise.

Remark: Before commencing the leg raising flatten the lumbar spine on the floor and maintain it until the lumbar spine is raised off the floor. In returning, when the lumbar spine comes to the floor, flatten it and maintain it till the legs are lowered on the floor.

2. *Plough Posture with Forearms Locked behind Head*

Stage 1: Assume supine-lying position with the legs extended, feet together, the forearms locked behind the head.

Stage 2: Raise slowly the legs, pelvis and trunk as in Plough Posture (Fig. 42A).

Stage 3: Return to stage 1 without any jerky movement and without bending the legs.

Breathing: Normal.

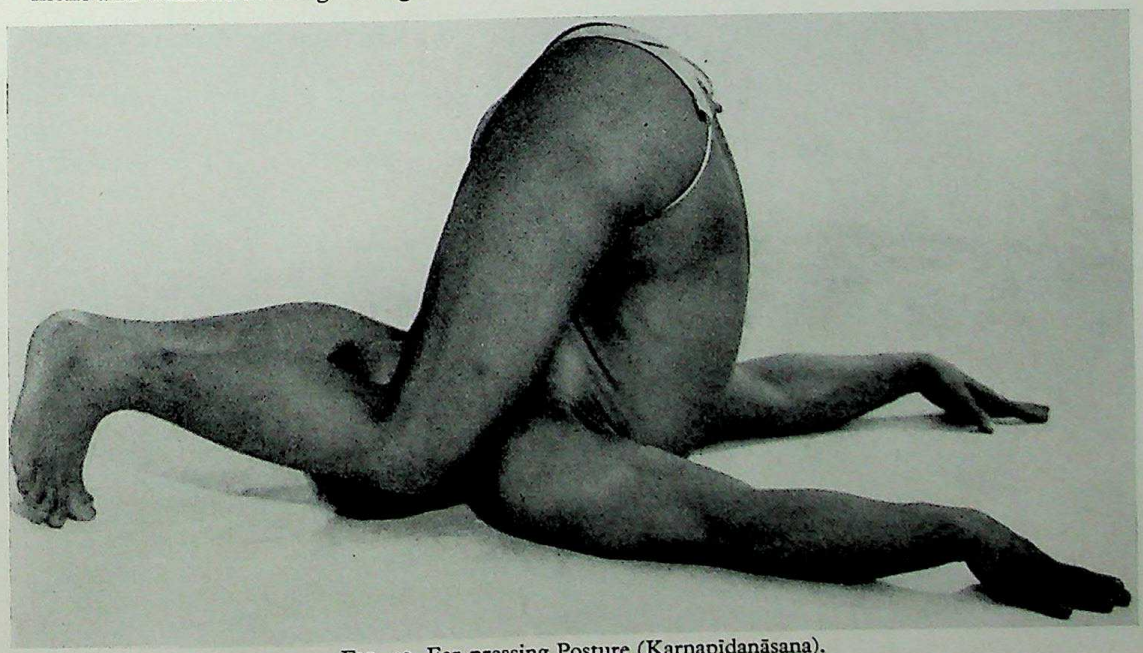


FIG. 43. Ear-pressing Posture (Karṇapīḍanāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

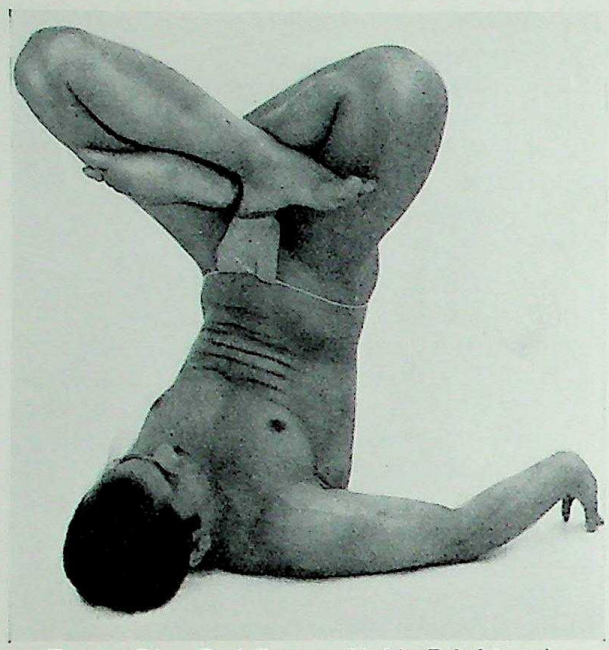


FIG. 44. Risen Back Posture (Utthita Pṛiṣṭhāsana).

Concentration: On the abdominal muscles, especially the rectus abdominis.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: Same as in Plough Posture.

3. *Ear-pressing Posture*

Stage 1: Assume supine-lying position with the legs extended, feet together, the arms extended by the sides.

Stage 2: Raise slowly the legs, pelvis and trunk, stage by stage, until the body is vertical. Then bend the knees downward to touch the ears with the legs extended beyond the head and the toes placed on the floor. Maintain the final attitude for a few seconds (Fig. 43).

Stage 3: Return slowly to stage 1.

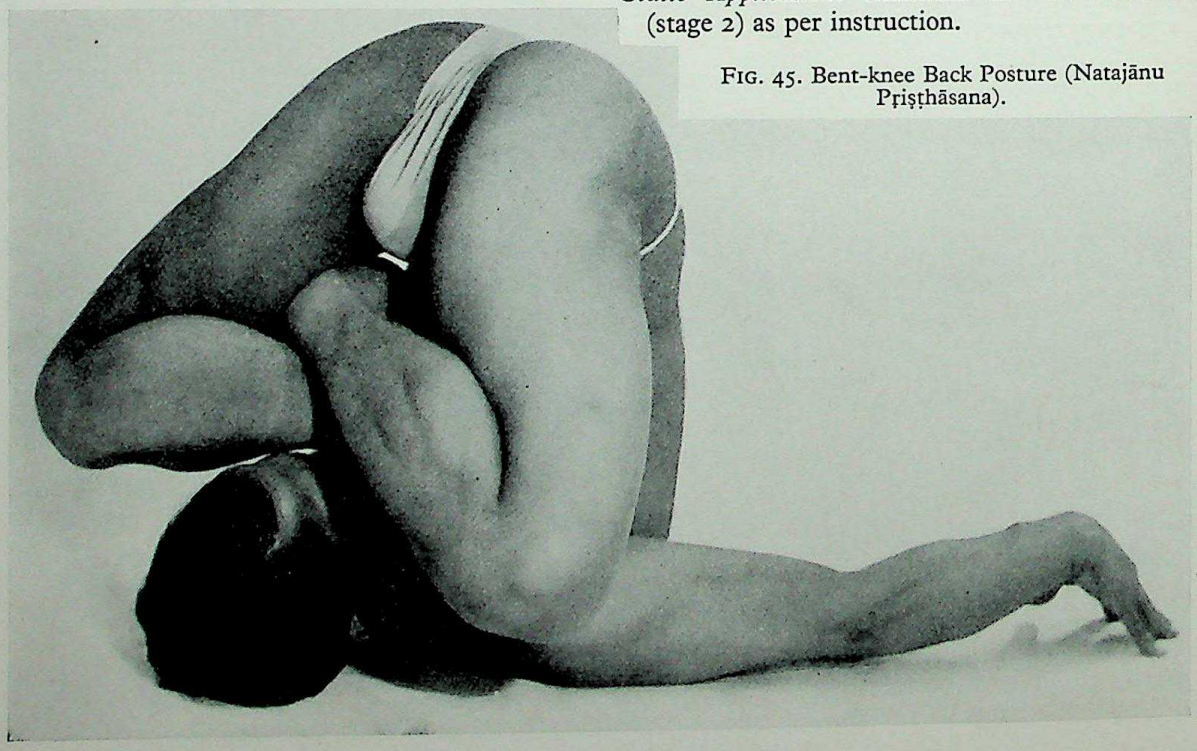
Breathing: Normal.

Concentration: On the abdominal muscles, especially the rectus abdominis.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

FIG. 45. Bent-knee Back Posture (Natajānu Pṛiṣṭhāsana).



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Relaxation: In Corpse Posture, after completion of the exercise.
Remark: Same as in Plough Posture.

4. *Risen Back Posture*
Stage 1: Assume Lotus Posture (Fig. 106).
Stage 2: Lie down with the arms extended by the sides, the folded legs down on the floor with the thighs placed on the floor.
Stage 3: Raise the legs, pelvis and the trunk without any jerk until the body is almost vertical, supporting on the arms. Maintain the final attitude for a few seconds (Fig. 44).
Stage 4: Return to stage 2.
Breathing: Normal.
Concentration: On the abdominal muscles, especially the rectus abdominis.
Dynamic Application: Stages 3 and 4 should be alternately executed.
Static Application: Maintain the final attitude (stage 3) as per instruction.
Relaxation: In Corpse Posture, after completion of the exercise.
Remark: This is an advanced abdominal exercise.

5. *Bent-knee Back Posture*
Stage 1: Assume Lotus Posture (Fig. 106).
Stage 2: Lie down with the arms extended by the sides, the folded legs down on the floor with the thighs placed on the floor.
Stage 3: Raise the legs, pelvis and trunk until the body is almost vertical as in Risen Back Posture.
Stage 4: Lower the knees down to the shoulders. Maintain the final attitude for a few seconds (Fig. 45).
Stage 5: Return to stage 3.
Breathing: Normal, or exhale in stage 4 and inhale in stage 5.
Concentration: On the abdominal muscles, especially the rectus abdominis.
Dynamic Application: Stages 4 and 5 should be alternately executed.
Static Application: Maintain the final attitude (stage 4) as per instruction.
Relaxation: In Corpse Posture, after completion of the exercise.

Leg-raise Posture Exercise

1. *Risen Leg Posture*
Stage 1: Assume supine-lying position with the legs extended, feet together, the arms extended by the sides.
Stage 2: Raise both legs simultaneously to a perpendicular position. Maintain the final attitude for a few seconds (Fig. 46).

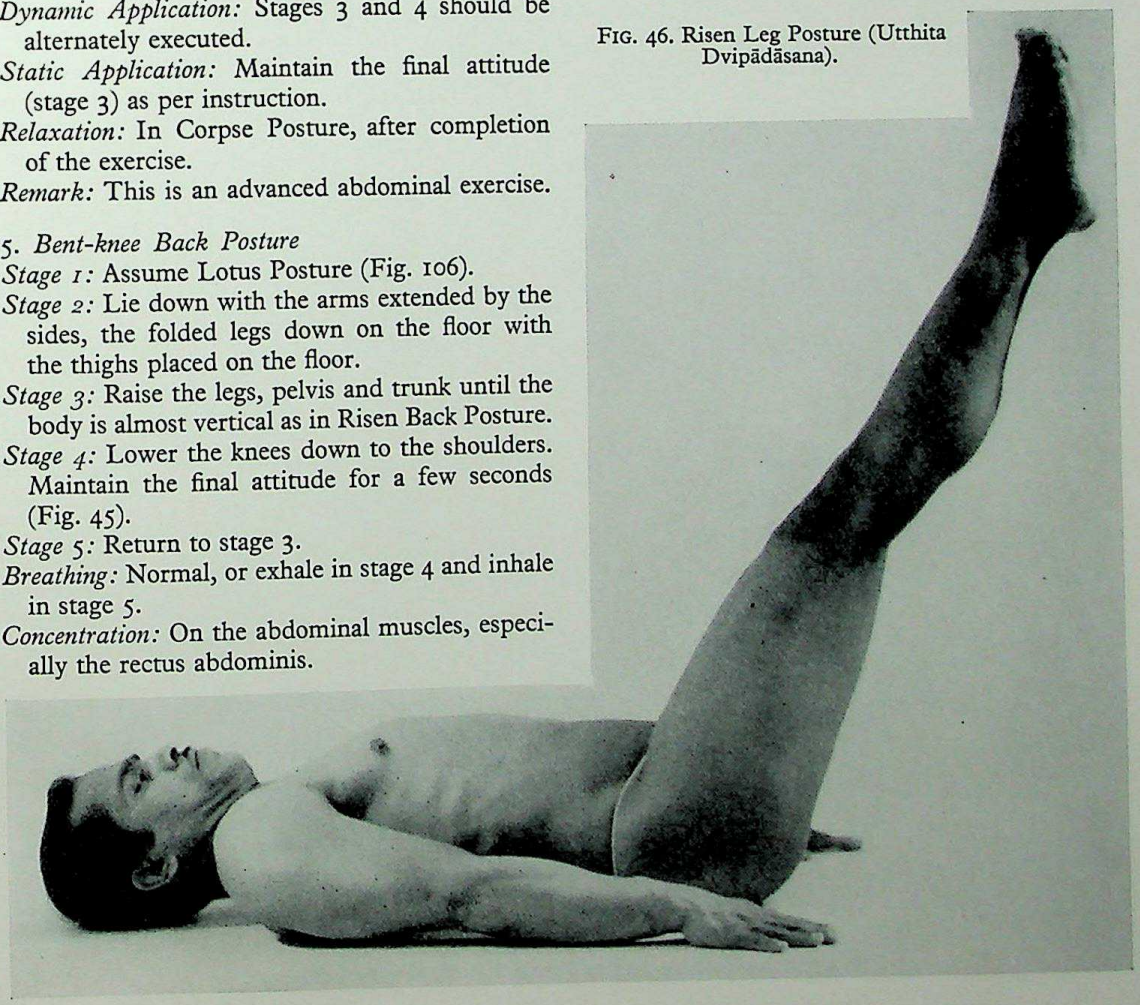


FIG. 46. Risen Leg Posture (Utthita Dvipādāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 3: Return to stage 1.

Breathing: Normal, or inhale in stage 2 and exhale in stage 3.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Unsuitable.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: The lumbar spine should be kept flattened during the leg-raising movement. In leg raising the hip flexors are brought into play. But when this exercise is employed for abdominal development, the mind should be concentrated on the abdominal muscles.

When one is not able to flatten the lumbar spine during this exercise, the abdominal muscles should first be strengthened by other abdominal exercises to gain this ability, before trying this exercise. It is desirable that first Single Risen Leg Posture in which one leg is raised instead of both legs at a time should be practised.

2. *Sideward Leg-motion Posture*

Stage 1: Assume supine-lying position with the legs extended, feet together, arms extended by the sides.

Stage 2: Raise the legs simultaneously to a perpendicular position and move them slowly to the right and left until the feet almost touch the floor, keeping the legs straight and the feet together (Fig. 47).

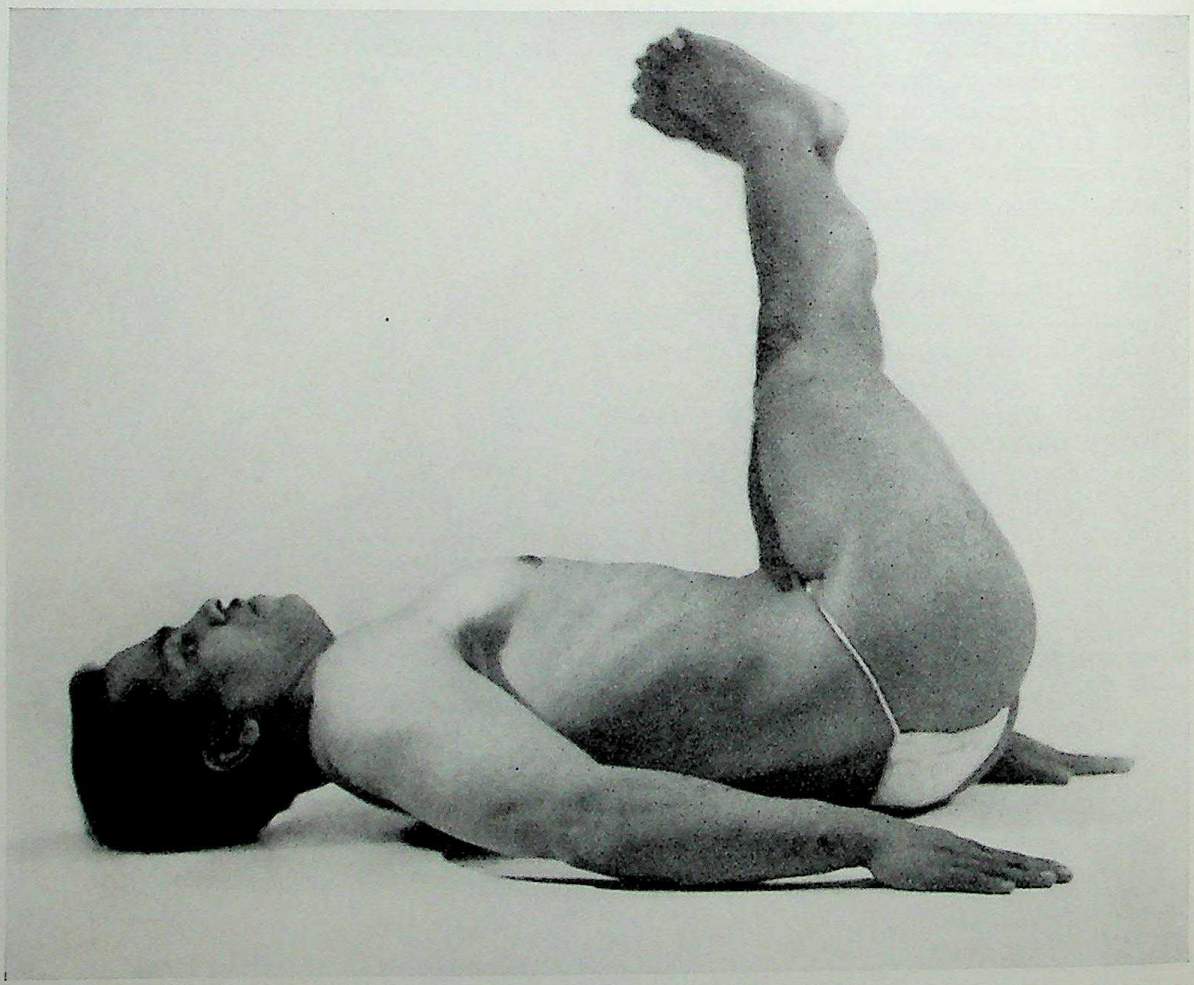


FIG. 47. Sideward Leg-motion Posture (Pārśva Pāda-cālanāsana).

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Stage 3: Return to stage 1 after completion of the exercise.
Breathing: Normal.
Concentration: On the abdominal muscles.
Dynamic Application: Stage 2.
Static Application: Not suitable.
Relaxation: In Corpse Posture, after completion of the exercise.

3. *Bent-leg Posture*

Stage 1: Assume supine-lying position with the legs extended, feet together, the arms by the sides, the hands on the waist.
Stage 2: Raise the legs simultaneously to a perpendicular position.
Stage 3: Lower the right leg to the floor at right angle to the body slowly from the perpendicular position and raise it again to the perpendicular position. Keep the leg unbent throughout the movement (Fig. 48).
Stage 4: The same movement with the left leg.
Breathing: Normal, or inhale when lowering the leg and exhale when raising it.
Concentration: On the abdominal muscles.
Dynamic Application: Stages 3 and 4.
Static Application: Not suitable.

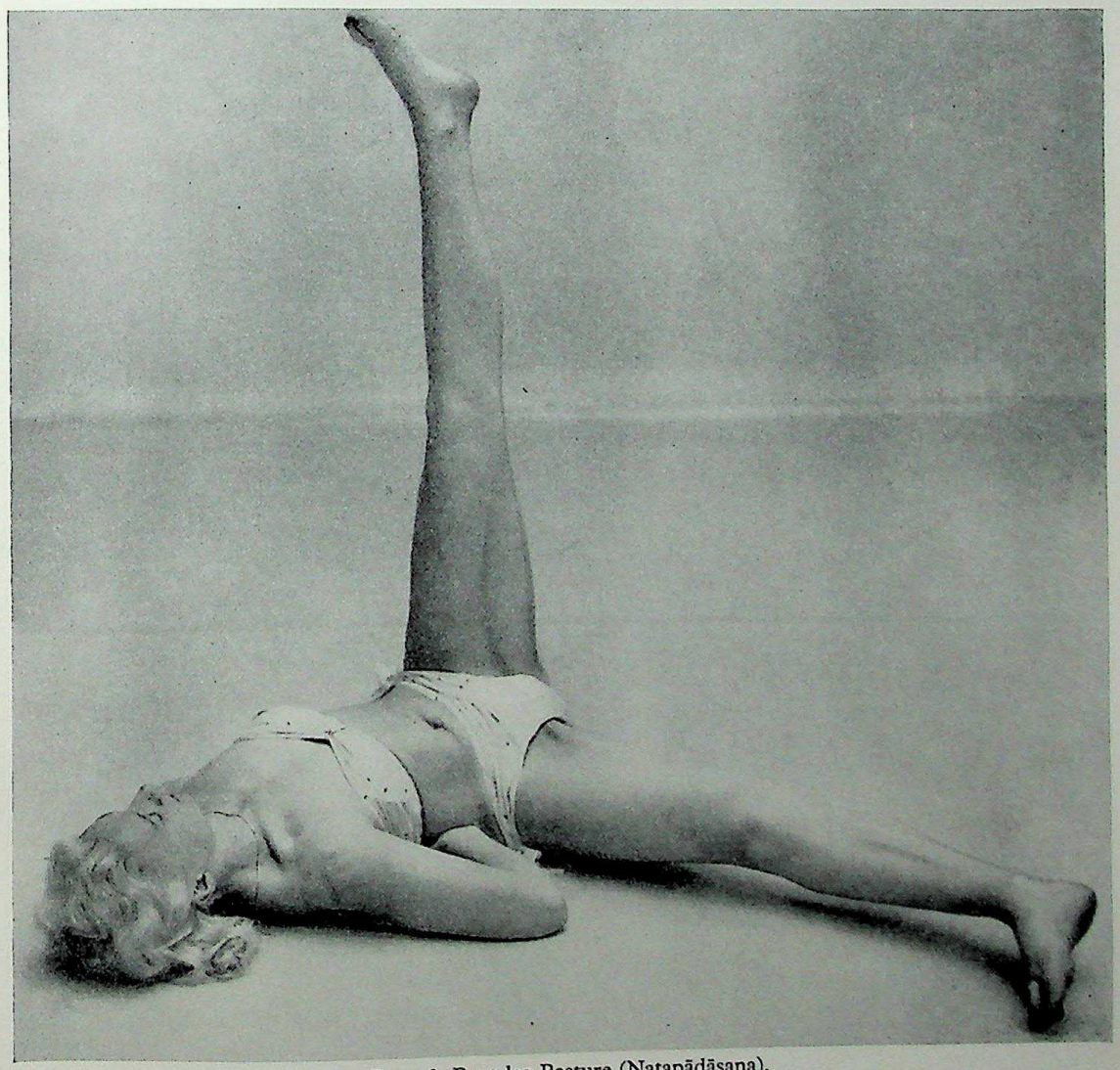


FIG. 48. Bent-leg Posture (Natapādāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

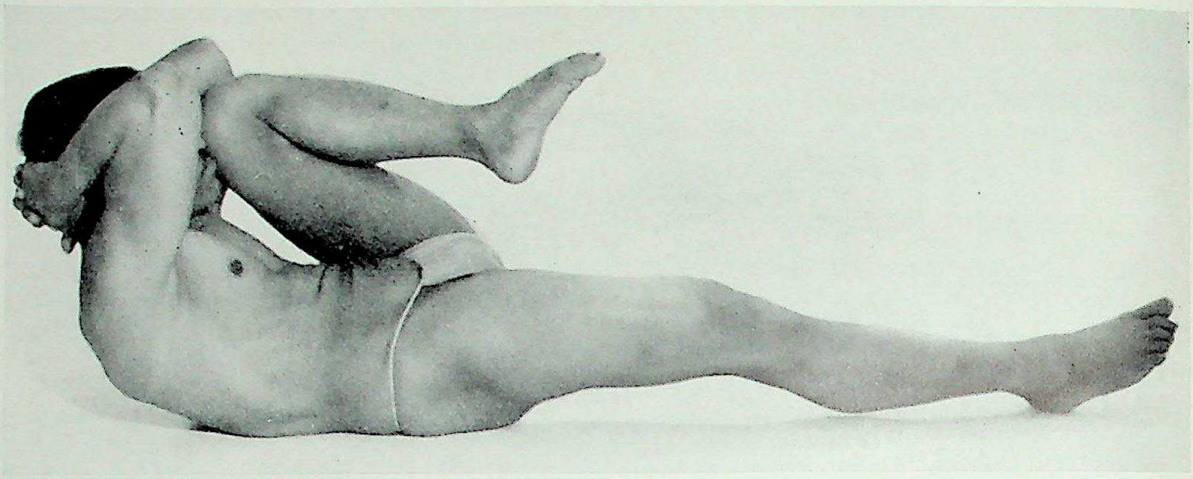
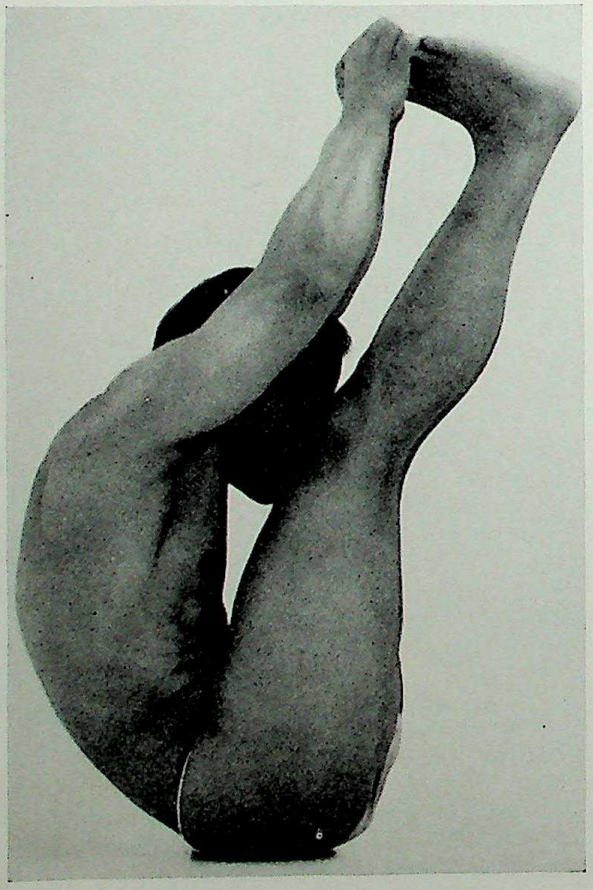


FIG. 49. Head-knee Spine Posture (Jānuśira Merudaṇḍāsana).

FIG. 50. Knee-touching Spine Posture (Bhālaspṛiṣṭajānu Merudaṇḍāsana).



Relaxation: In Corpse Posture, after completion of the exercise.

Anterior Trunk-leg-raise Posture Exercise

1. *Head-knee Spine Posture*

Stage 1: Assume supine-lying position with the hands clasped behind the head, the legs extended, feet together.

Stage 2: Raise the head and the trunk to a point at which the region of the 7th cervical vertebra is from 6 to 8 inches from the floor and at the same time bring the left knee to the forehead by bending at the knee. Maintain the final attitude for a few seconds (Fig. 49).

Stage 3: Return to stage 1.

Stage 4: Same movement (stage 2) with the right leg.

Stage 5: Return to stage 1.

Breathing: Normal.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.

Static Application: The final attitude (stages 2 and 4) should be maintained as per instruction.

Relaxation: In Corpse Posture, after the exercise is over.

2. *Knee-touching Spine Posture*

Stage 1: Assume supine-lying position with the legs extended, feet together, arms extended over the head.

Stage 2: Raise the legs and at the same time the trunk and the arms slowly until the legs and the trunk are almost vertical. At this stage hold

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the toes with the hands and touch the knees with the forehead. Maintain the final attitude for a few seconds. There should be no jerk and the legs should be kept unbent during the exercise (Fig. 50).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Corpse Posture, after completion of the exercise.

3. *Pillow Posture*

Stage 1: Assume supine-lying position with the legs extended, feet together, arms by the sides.

Stage 2: Raise the left leg and bring it towards the head. Now with the help of the hands place the left foot behind the neck, at the same time raising the head and the trunk quite high. The body will now remain on the buttocks, lower part of the trunk and right leg. Maintain the final attitude for a few seconds (Fig. 51).

Stage 3: Return to stage 1.

Stage 4: Perform the movement with the right leg in a similar manner (stage 2).

Stage 5: Return to stage 1.

Breathing: Normal.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: It is an advanced abdominal exercise requiring great relaxation of the hamstring muscles for the flexion of the hip joint as is required in this exercise.

Lateral Trunk-leg-raise Posture Exercise

1. *Toe-hold Lateral Spine Posture*

Stage 1: Assume right side-lying position with the trunk, pelvis and legs in a straight line, the left arm extended downward along the left side and on the left thigh, the right forearm locked behind the right side of the head.

Stage 2: Raise the head and the trunk laterally until the trunk is lifted off the floor as much as possible. The locked forearm should be raised along with the head. During the head and trunk raising, the left leg should also be raised to a perpendicular position and the left toes should be held with the left hand by extending the left arm upward. Maintain the final attitude for a few seconds (Fig. 52).

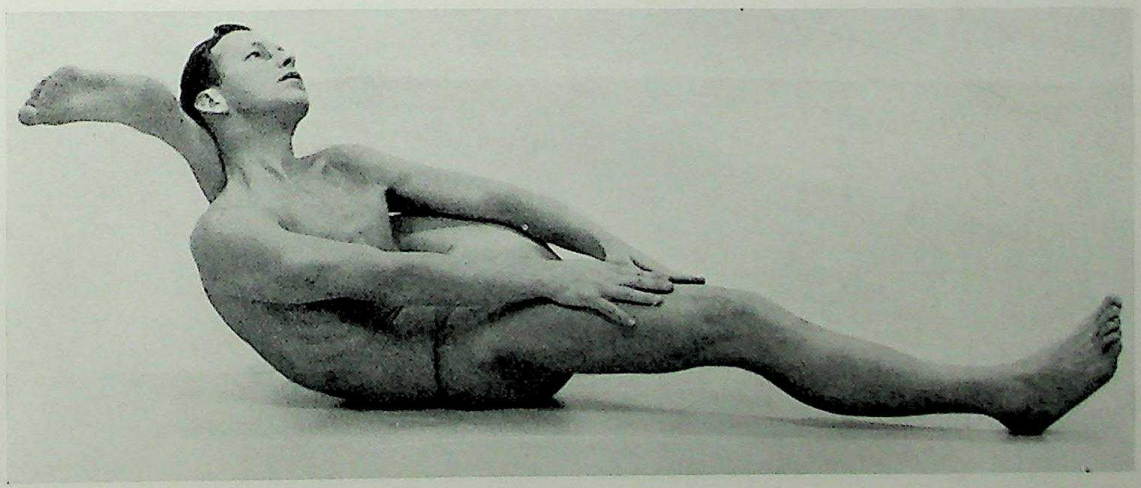


FIG. 51. Pillow Posture (Upādhānāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 3: Return to stage 1.

Stage 4: Assume left side-lying position in the same manner (stage 1).

Stage 5: Perform the movement in a similar manner (stage 2).

Stage 6: Return to stage 4.

Breathing: Normal.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 and 5 and 6 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 5) as per instruction.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: Avoid twisting the body as much as possible when raising the trunk. It is an advanced exercise. It is desirable to practise this exercise first with the support of the disengaged arm to gain strength.

Supplementary Abdominal Posture Exercise

1. *Risen Right-angle Posture*

Stage 1: Sit with the legs extended in front, the arms by the sides, the palms on the ground.

Stage 2: Raise the buttocks and the legs simultaneously off the floor, keeping the legs unbent and supporting the body on the hands. Maintain the attitude for a few seconds (Fig. 53).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the abdominal muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Not suitable.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: It is an advanced abdominal exercise.

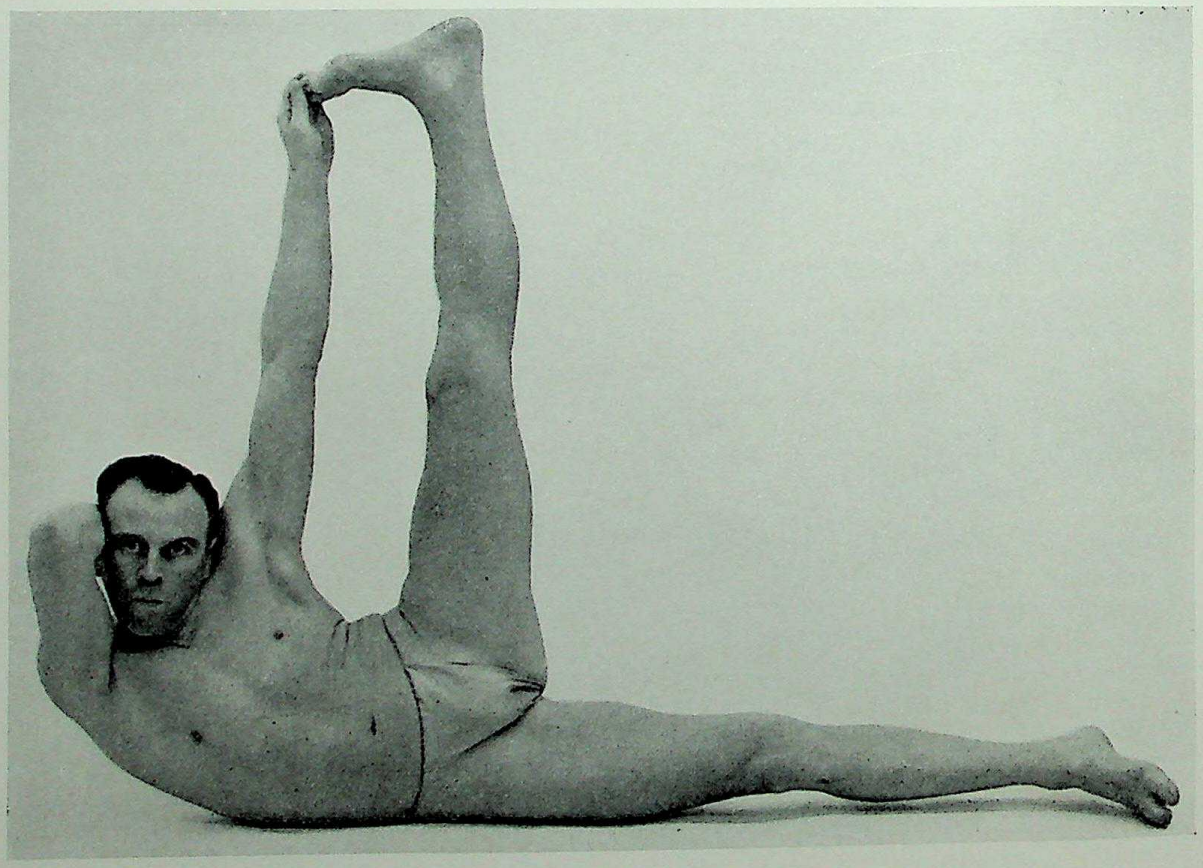


FIG. 52. Toe-hold Lateral Spine Posture (Baddhāṅguli Pārśva Merudaṇḍāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

FIG. 53. Risen Right-angle Posture (Utthita Samakoṇāsana).

2. *Bent-knee Inverse Lotus Posture*

Stage 1: Assume Inverse Lotus Posture (Fig. 104).

Stage 2: Lower the knees down to the elbows. Maintain the final attitude for a few seconds (Fig. 54).

Stage 3: Return to stage 1.

Breathing: Normal, or exhale when lowering the knees and inhale when raising them.

Concentration: On the abdominal muscles, especially the rectus abdominis.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: It is also a balance and inverse-body posture.

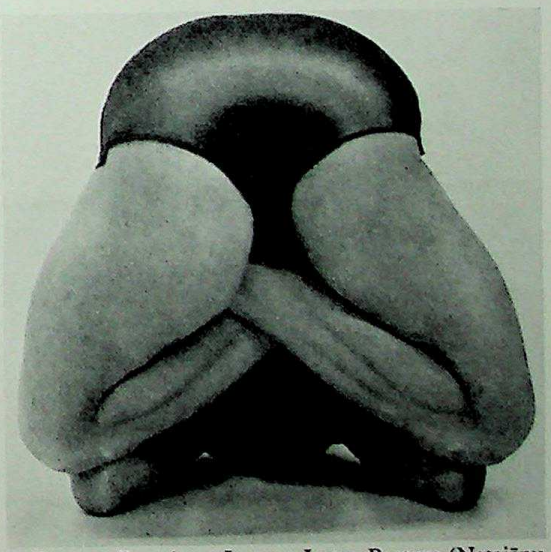


FIG. 54. Bent-knee Inverse Lotus Posture (Natajānu Ūrdhva Padmāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

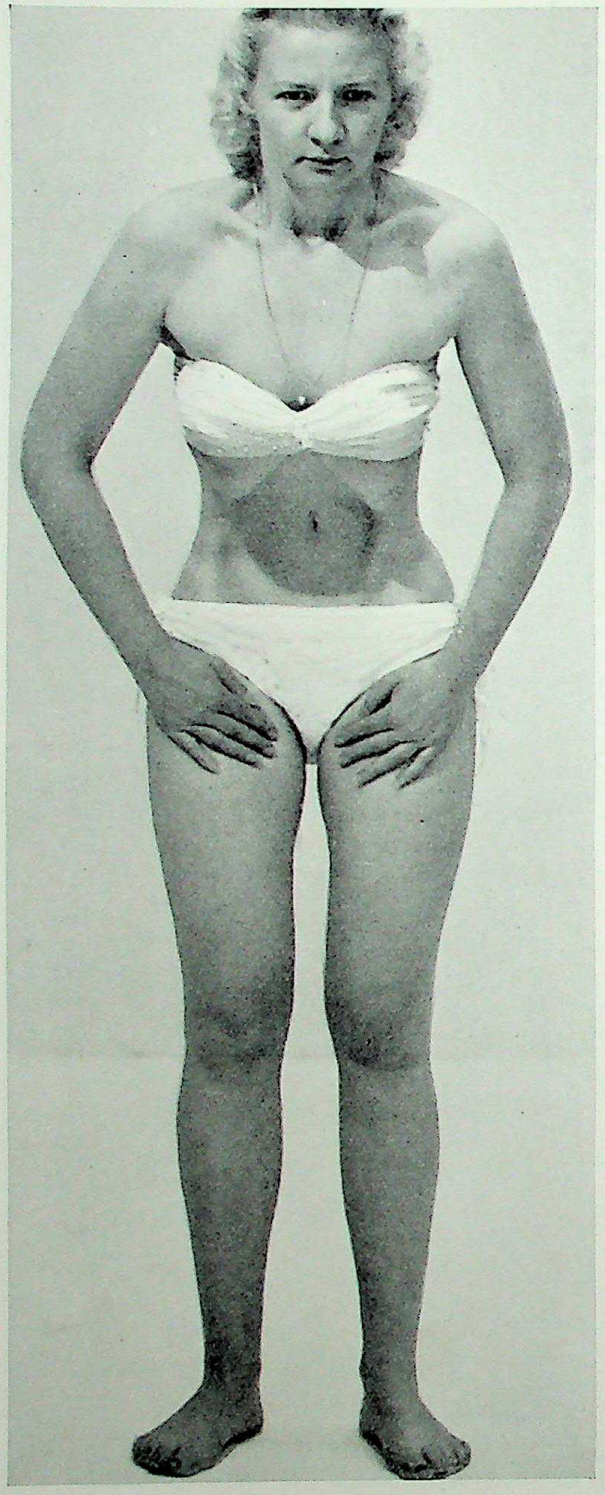


FIG. 55. Abdomino-retraction Act (Uḍḍīyāna).

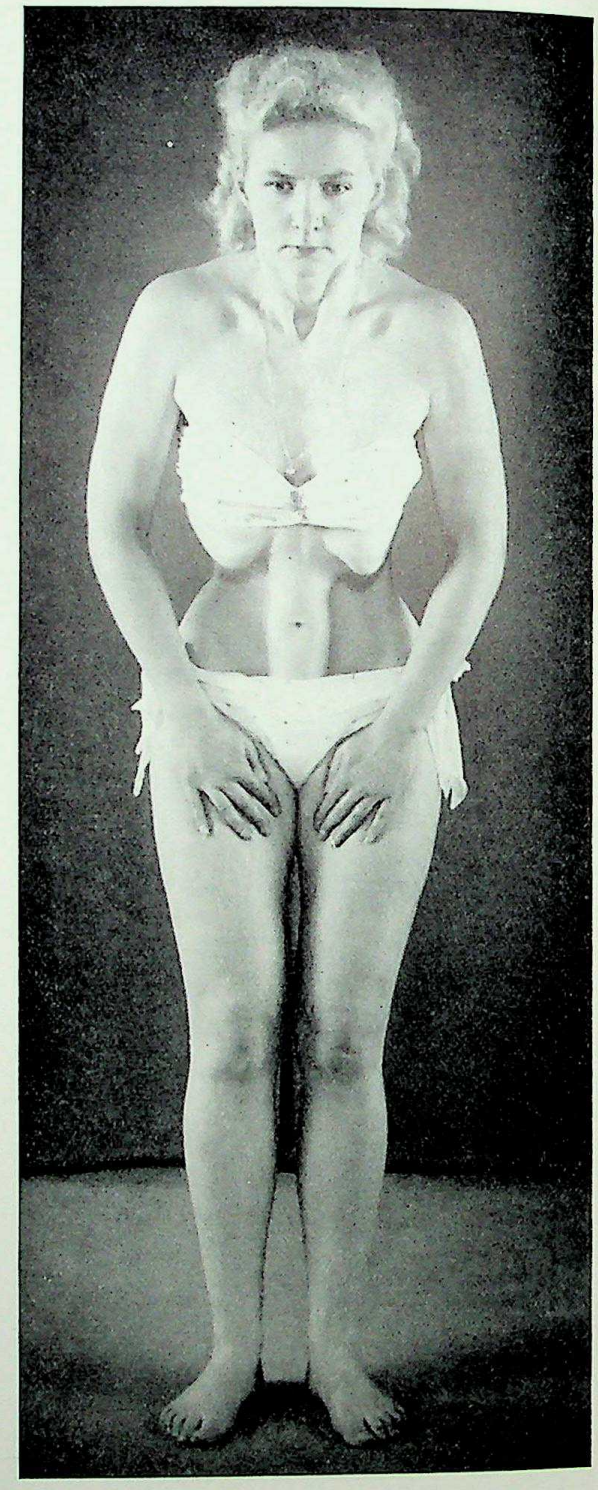


FIG. 56. Straight-muscle Act, Central Isolation (Nauli).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Abdomino-control Exercise

Abdomino - retraction Act (Uḍḍīyāna) and Straight-muscle Act (Naulī) are the most important of all abdomino-control exercises. Full control over the abdominal muscles is attained by the practice of these two exercises. The alimentary canal is profoundly influenced by these control exercises. Abdomino-retraction Act is the best exercise for the transversus abdominis and Straight-muscle Act for the isolation and full control of the rectus abdominis.

1. *Abdomino-retraction Act* (Uḍḍīyāna)

Stage 1: Stand with the heels either together or a few inches apart. It is more convenient for beginners to bend the body slightly forward with the legs slightly bent at the knees. When better control is gained, the body may be kept erect. The hands are either on the thighs or the arms by the sides.

Stage 2: Relax the abdomen completely. Now expire fully and at the end of expiration hold the breath. During the expiratory breath suspension try to draw the abdomen inward and upward as much as possible by a muscular effort with the concentration of the mind. This will result in the concave appearance of the abdomen. Maintain this abdominal state for a few seconds (Fig. 55).

Stage 3: Relax the abdomen and inspire.

Breathing: As stated above (stage 2).

Concentration: On the retraction act.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the retracted abdomen (stage 2) as per instruction.

Relaxation: In Standing Posture, after the exercise is over.

Remark: This exercise should be performed when the stomach is empty. The best time is in the morning after toilet and oral cleansing. The next best time is in the evening, before dinner.

If there is an accumulation of fat beyond the normal limit, it should be reduced by general and abdominal posture exercises, restricted diet, fasting and other appropriate measures. This exercise can also be performed in any folded-leg posture.

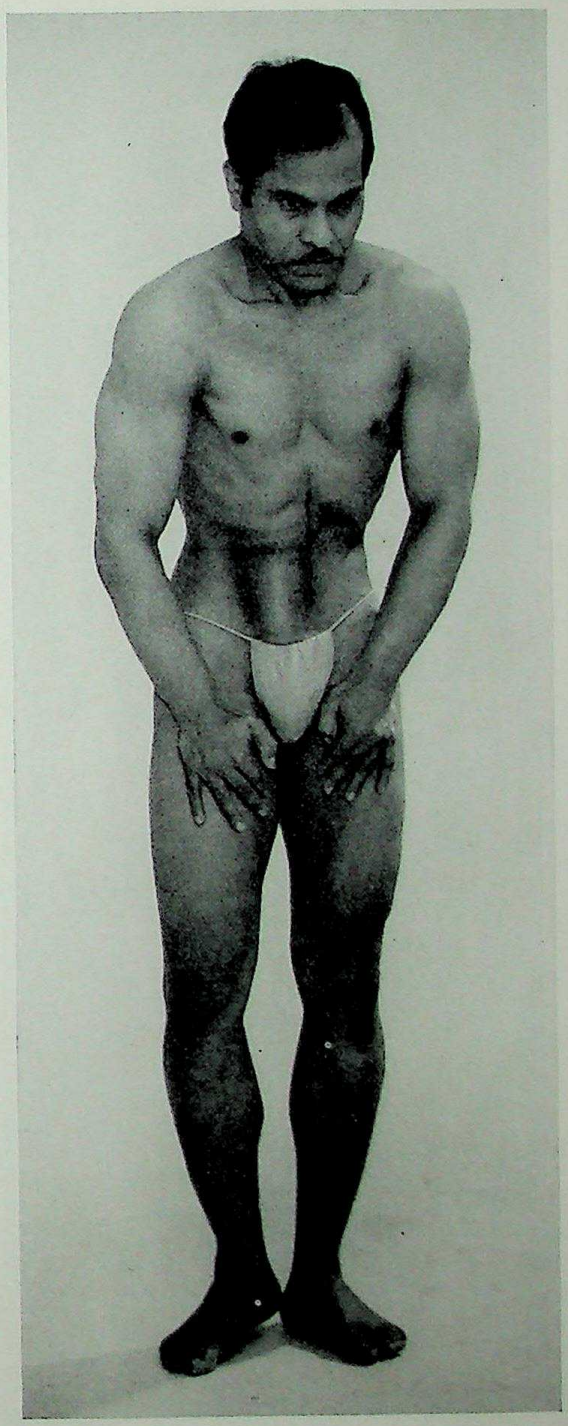


FIG. 57. Straight-muscle Act, Uni-lateral Isolation, making both Recti stand in the Right Side (Naulī).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

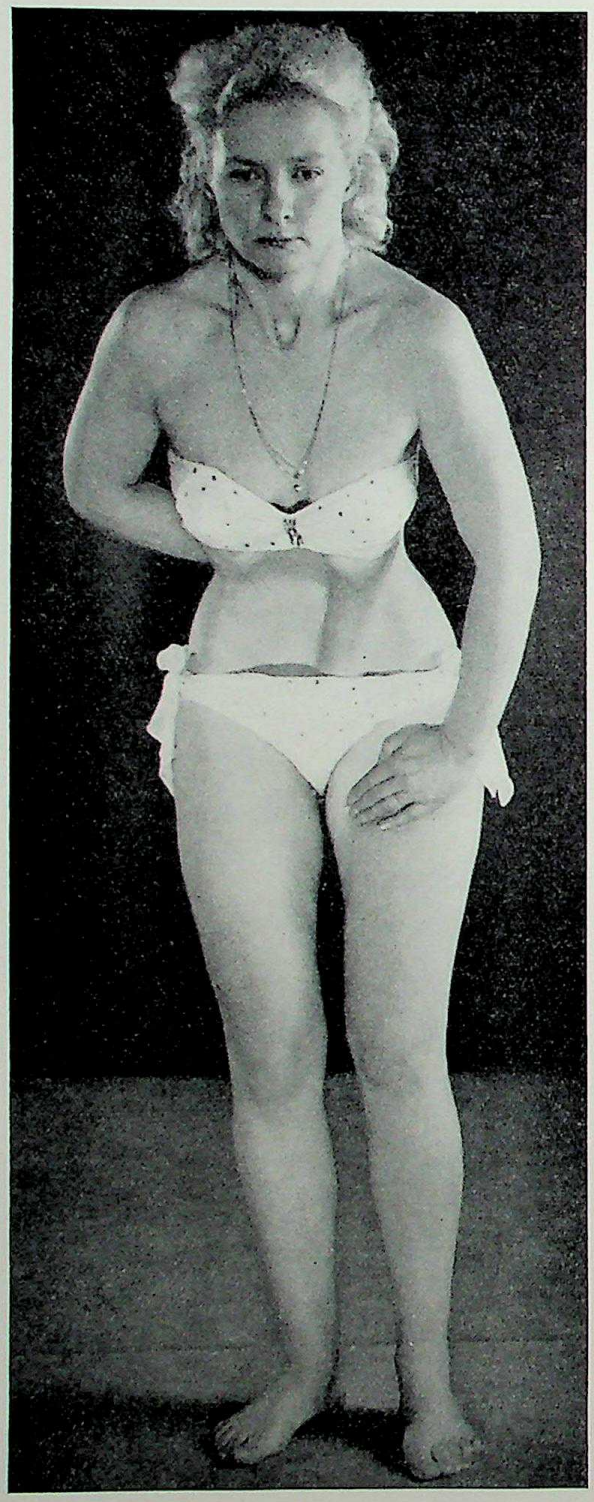


FIG. 58. Straight-muscle Act, Uni-lateral Isolation, making Left Rectus stand in the Left Side (Naulī).

2. *Straight-muscle Act* (Naulī)

Stage 1: Stand with the heels either together or a few inches apart, the legs either straight or slightly bent at the knees, the body bent forward, and the hands on the thighs.

Stage 2: Relax the abdomen completely. Now expire fully and at the end of expiration hold the breath. During the expiratory breath suspension first perform Abdomino-retraction Act and then try to cause the rectus abdominis to stand out against the collapsed abdomen by pressing strongly on the thighs with the hands and by making skilfully a forward-downward abdominal thrust. Concentrate your mind fully on the process. Maintain the isolated rectus abdominis for a few seconds (Fig. 56).

Stage 3: Relax the abdomen and inspire.

Breathing: As stated above (stage 2).

Concentration: On the isolated rectus abdominis.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the isolated rectus abdominis (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

Remark: After the central isolation of the rectus abdominis is mastered, the right and the left isolation can be practised. In right isolation the rectus abdominis is made to stand out in the right side of the abdomen. In a similar way it is made to stand out in the left side in left isolation. The unilateral isolation consists of two processes. In one, both recti are brought to the side (Fig. 57). In another, the right rectus abdominis is isolated and made to stand out in the right side of the abdomen while keeping the left rectus abdominis relaxed. In a similar manner the left rectus abdominis is made to stand out in the left side (Fig. 58).

In the standing position (stage 1), the skilful application of the right-hand pressure will cause the right isolation and that of the left-hand pressure left isolation. When sufficient control is gained, the rectus abdominis may be turned from the right to the left and vice versa. Finally, the rectus abdominis may be rolled in all possible directions.

For time, etc., see the remark under Abdomino-retraction Act.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XVI

Pelvic Posture Exercise

THE pelvic and the perineal muscles are exercised, strengthened and controlled by pelvic exercise. It is closely associated with sex efficiency and control. Pelvic exercise is subdivided into pelvic posture exercise and pelvic control exercise.

The following are the pelvic posture exercises:

1. *Pelvis-raise Posture*

Stage 1: Sit with the legs extended in front, heels together, the arms by the sides.

Stage 2: Raise the pelvis and the trunk as high as you can by supporting yourself on the hands and feet. Maintain the final attitude for a few seconds (Fig. 59).

Stage 3: Return to stage 1.

Breathing: Normal, or inhale in stage 2 and exhale in stage 3.

Concentration: On the pelvic and perineal part.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In the sitting position (stage 1), after completion of the exercise.

Remark: Certain leg movements are executed in the final attitude of this exercise. They are called Pelvis-raise Posture exercise. Some of the exercises are as follows:

(1) Raising one leg to a perpendicular position and lowering it.

(2) Lowering one leg from the perpendicular position sideward to the floor.

(3) Lowering one leg from the perpendicular position sideward to the floor to the opposite side.

(4) Bringing the knee to the chest.

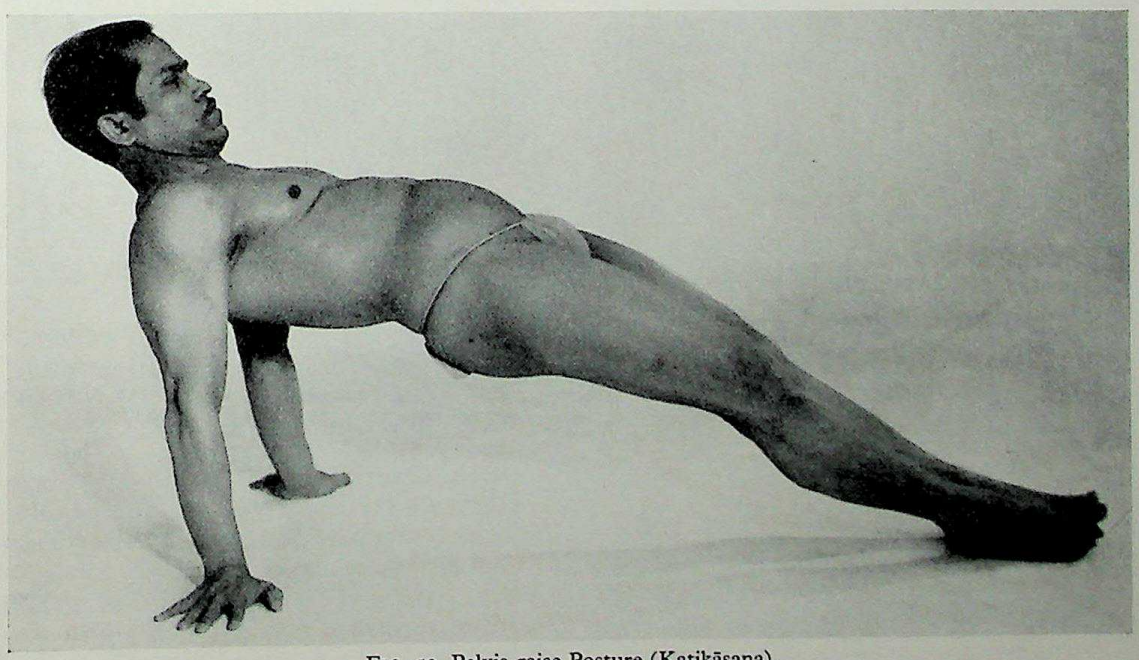


FIG. 59. Pelvis-raise Posture (Kaṭikāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

2. *Arm-head Posture*

Stage 1: Sit with the left leg folded, bending at the knee, the thigh on the lower leg, the left foot under the left buttock, the right knee elevated, the arms by the sides.

Stage 2: Insert the right arm under the right knee and lift it to the right side of the head and then clasp the hands behind the neck. Maintain the final attitude for a few seconds (Fig. 60).

Stage 3: Return to stage 1.

Stage 4: Sit in the same way (stage 1) with the right leg folded.

Stage 5: Raise the left knee in a similar manner (stage 2).

Stage 6: Return to stage 4.

Breathing: Normal.

Concentration: On the pelvic and perineal part.

Dynamic Application: Stages 2 and 3 and 5 and 6 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 5) as per instruction.

Relaxation: In the sitting position with the legs extended forward and the arms by the sides, after completion of the exercise.

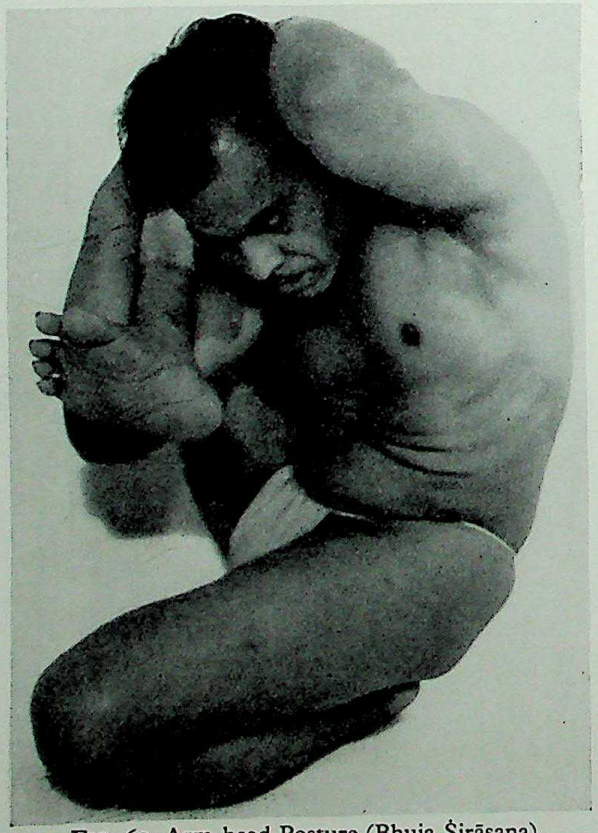


FIG. 60. Arm-head Posture (Bhuja Śirāsana).

3. *Single Foot-head Posture*

Stage 1: Sit erect with the right heel set against the perineum.

Stage 2: Place with the help of the hands the left leg across the neck by making the left thigh stand in a slanting manner. Now remove the hands from the left leg. Maintain the final attitude for a few seconds (Fig. 61).

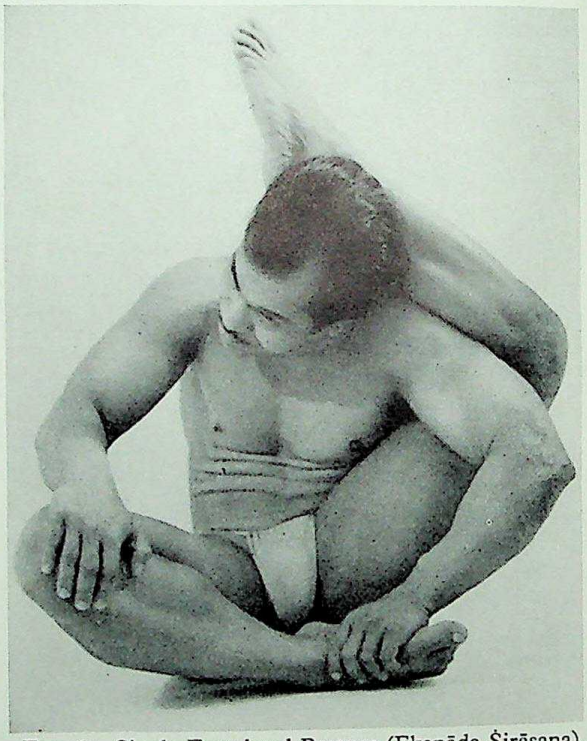


FIG. 61. Single Foot-head Posture (Ekapāda Śirāsana).

Stage 3: Return to stage 1.

Stage 4: Sit with the left heel set against the perineum.

Stage 5: Place the left leg across the neck in a similar manner (stage 2).

Stage 6: Return to stage 4.

Breathing: Normal.

Concentration: On the pelvic and perineal part.

Dynamic Application: Stages 2 and 3 and 5 and 6 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 5) as per instruction.

Relaxation: In the sitting position with the legs

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

extended forward and the arms by the sides, after completion of the exercise.

Remark: This exercise develops the flexibility of the hip joints and causes relaxation, to a great extent, of the hamstring muscles.

4. *Double Foot-head Posture*

Stage 1: Sit erect with the legs extended forward.

Stage 2: Place both legs with the ankles crossed at the back of the neck with the help of the hands. One can do this with one or both legs together. Then remove the hands from the legs and either keep the arms extended across the thighs or the hands folded at the chest. Maintain the final attitude for a few seconds (Fig. 62).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the pelvic and perineal part.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In the sitting position with the legs extended forward and the arms by the sides, after completion of the exercise.

Remark: Same as in Single Foot-head Posture.

5. *Single Foot-head Head-knee Posture*

Stage 1: Sit erect with the legs extended in front, the arms by the sides. Then place the right leg behind the neck as in Single Foot-head Posture, keeping the left leg stretched forward.

Stage 2: Bend the body forward and downward, hold the toes of the left foot with both hands and bring the head to the left knee, keeping the left leg straight. Maintain the final attitude for a few seconds (Fig. 63).

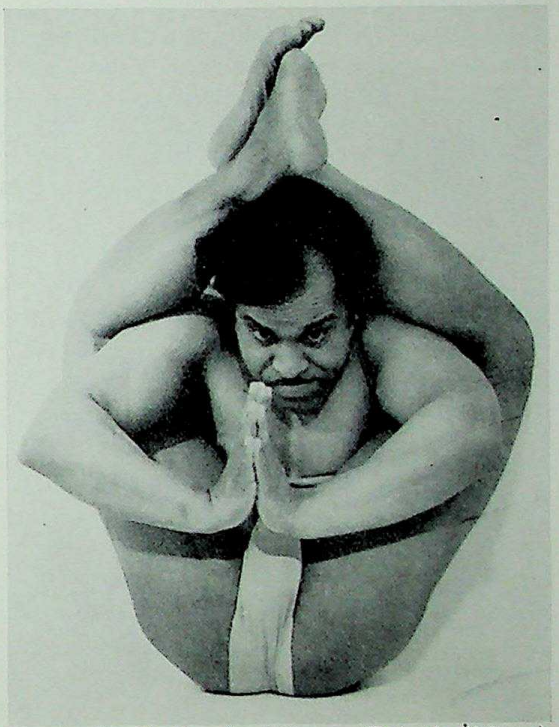


FIG. 62. Double Foot-head Posture (Dvipāda Śirāsana).

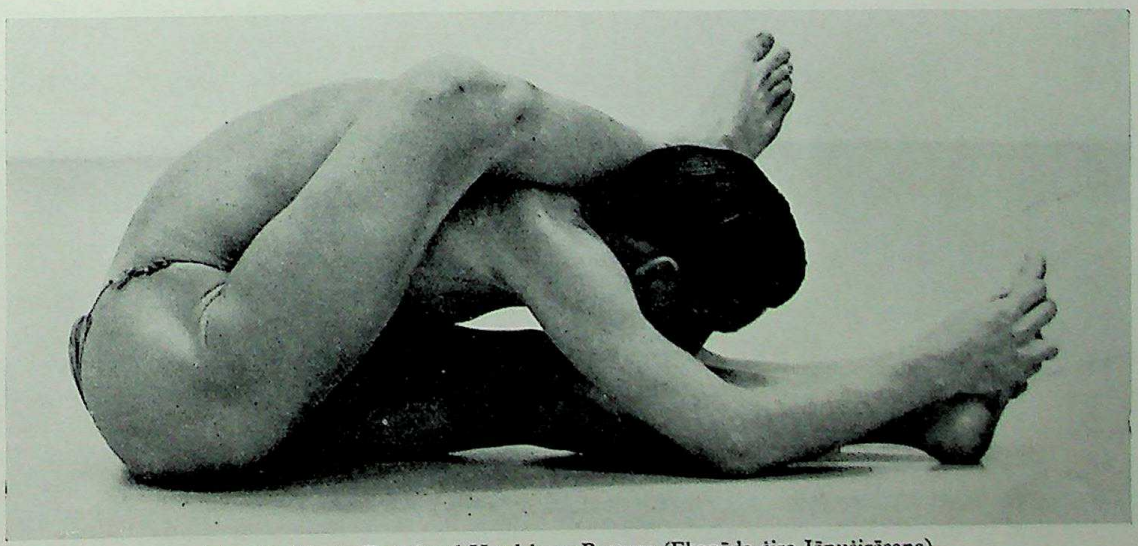


FIG. 63. Single Foot-head Head-knee Posture (Ekapāda-śira Jānuśirāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 3: Return to stage 1.
Stage 4: Sit with the left leg placed behind the neck as in stage 1.
Stage 5: Bend the body to the right leg as in stage 2.
Stage 6: Return to stage 4.
Breathing: Normal.
Concentration: On the pelvic and perineal part.
Dynamic Application: Stages 2 and 3 and 5 and 6 should be alternately executed.
Static Application: Maintain the final attitude (stages 2 and 5) as per instruction.
Relaxation: In the sitting position with the legs extended forward and the arms by the sides, after completion of the exercise.

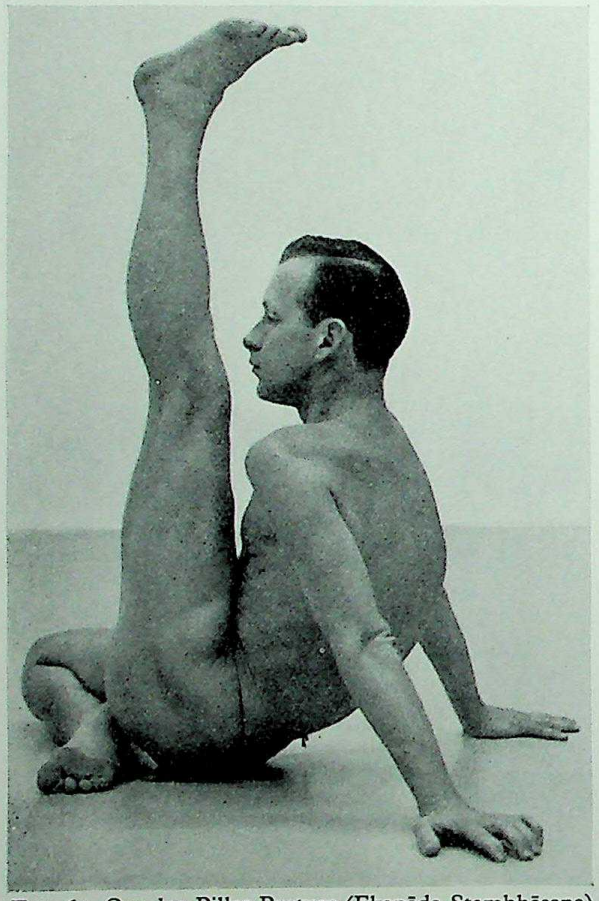


FIG. 64. One-leg Pillar Posture (Ekapāda Stambhāsana).

6. *One-leg Pillar Posture*

Stage 1: Sit erect with the left leg extended in front, the right heel set against the perineum, the arms by the sides, the palms on the floor.

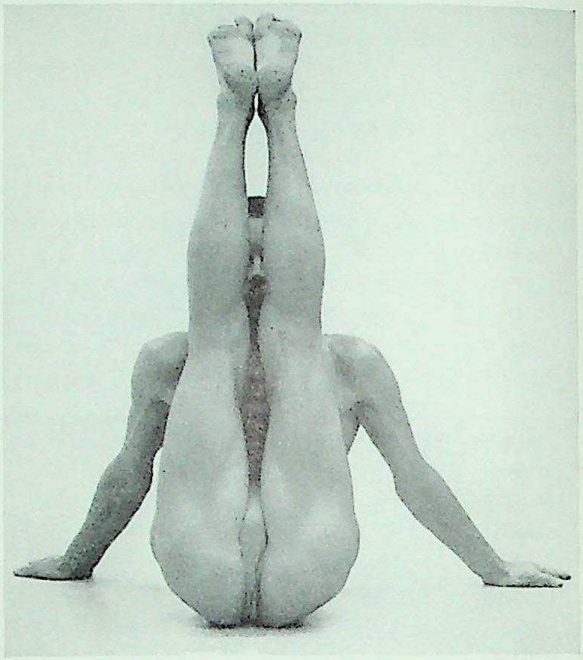


FIG. 65. Pillar Posture (Stambhāsana).

Stage 2: Raise slowly the left leg upward by applying a downward pressure with the hands until it is vertical, keeping the leg straight and without bending the body backward too much. There should be no jerk in the movement. Maintain the final attitude for a few seconds (Fig. 64).
Stage 3: Return to stage 1.
Stage 4: Sit with the right leg extended, the left heel against the perineum.
Stage 5: Raise slowly the right leg as in stage 2.
Stage 6: Return to stage 4.
Breathing: Normal, or inhale when raising the leg, exhale when lowering it.
Concentration: On the pelvic and perineal part.
Dynamic Application: Stages 2 and 3 and 5 and 6 should be alternately executed.
Static Application: Maintain the final attitude (stages 2 and 5) as per instruction.
Relaxation: In the sitting position with the legs extended forward and the arms by the sides, after completion of the exercise.
Remark: This exercise requires relaxation of the hamstring muscles and flexibility of the hip joint to a remarkable extent. Regular practice of the exercise will develop them.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

7. *Pillar Posture*

Stage 1: Sit erect with the legs extended in front, the heels together, the arms by the sides, the palms on the floor.

Stage 2: Raise slowly both legs upward until they are vertical by applying a downward pressure with the hands. The legs should be kept straight, the body should not be bent backward too much and there should not be any jerk during the movement. Maintain the final attitude for a few seconds (Fig. 65).

Stage 3: Return to stage 1.

Breathing: Normal, or inhale when raising the legs and exhale when lowering them.

Concentration: On the pelvic and perineal part.

Dynamic Application: Stage 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In the sitting position with the legs extended forward and the arms by the sides, after completion of the exercise.

Remark: Same as in One-leg Pillar Posture.

FIG. 66. Noose Posture (Pāśinī-mudrā).

8. *Noose Posture*

Stage 1: Assume supine-lying position with the legs extended, the feet together, the arms by the sides.

Stage 2: Raise both legs and place them with the ankles crossed at the back of the neck with the help of the hands by raising the head, shoulders and the pelvis from the floor. Then remove the hands from the legs, and either keep the arms extended across the thighs or the hands folded at the hip region. Maintain the attitude for a few seconds (Fig. 66).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the pelvic and perineal part.

Dynamic Application: Stage 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: Same as in One-leg Pillar Posture.

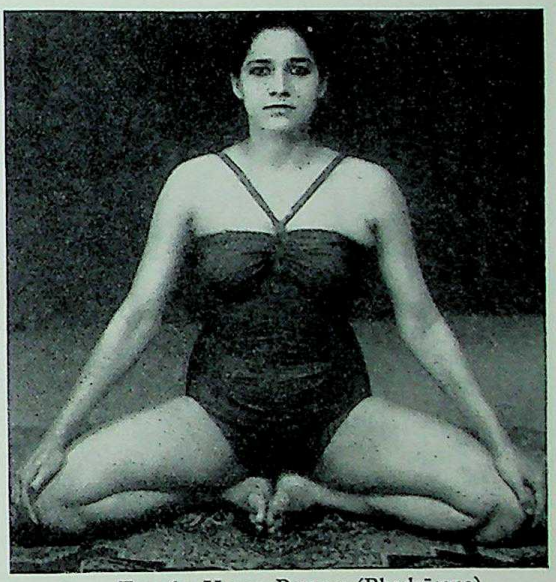


FIG. 67. Happy Posture (Bhadrāsana).

Supplementary Pelvic Posture Exercise

1. *Happy Posture*

Stage 1: Sit erect with the legs extended in front, the arms by the sides.

Stage 2: Place the heels against the perineum with the soles together, the toes extending towards the front, the knees bent on the floor, and the hands of the extended arms on the knees. Maintain the final attitude for a few seconds (Fig. 67).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the pelvic and perineal part.

Dynamic Application: Not suitable.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In the sitting posture with the legs extended in front and the arms by the sides, after completion of the exercise.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

2. *Sideward Leg-stretch Posture*

Stage 1: Sit erect with the legs extended in front, the arms by the sides.

Stage 2: Bring the legs to the sides and keep them extended sideward. Keep them perfectly straight and on the floor. Extend the arms sideward and place the hands on the knees. Maintain the final attitude for a few seconds (Fig. 68).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the pelvic and perineal part.

Stage 3: Return to stage 1.

Stage 4: Reverse the position of the legs.

Stage 5: Return to stage 1.

Breathing: Normal.

Concentration: On the pelvic and perineal part.

Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.

Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.

Relaxation: In the sitting position with the legs extended in front and the arms by the sides, after completion of the exercise.

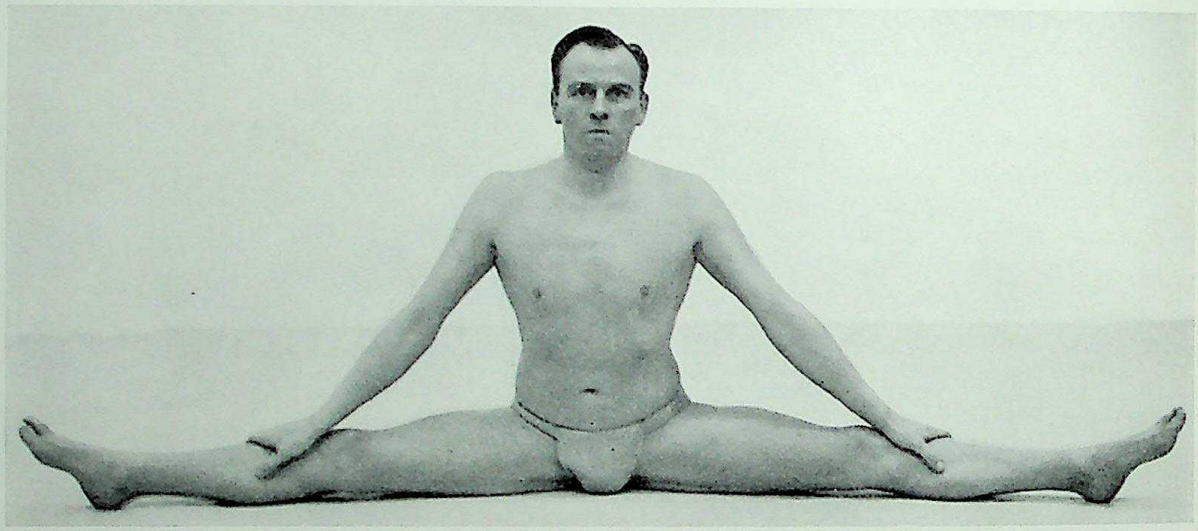


FIG. 68. Sideward Leg-stretch Posture (Pādaprasāraṇāsana).

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In the sitting position with the legs extended in front and the arms by the sides, after completion of the exercise.

Remark: Same as in One-leg Pillar Posture.

3. *Backward-forward Leg-stretch Posture*

Stage 1: Sit erect with the legs extended in front, the arms by the sides.

Stage 2: Bring the left leg to the back and extend it backward, keeping the right leg extended forward. Both legs are now almost in a straight line, unbent at the knees and on the floor. Keep the hands folded at the chest. Maintain the attitude for a few seconds (Fig. 69).

Remark: Same as in One-leg Pillar Posture.

Pelvic Control Exercise

1. *Anal Act*

Stage 1: Sit in Accomplished Posture (Fig. 105) or Pleasant Posture (Fig. 107).

Stage 2: Contract the anus in such a way as to cause an inward movement of the anal region as well as the genital region.

Stage 3: After the contractile movement, relax the anus. The relaxation will be a passive act. Do not force the anus out voluntarily during relaxation.

Breathing: Normal.

Concentration: On the anal contraction and relaxation.

Dynamic Application: The conscious and active anal contraction and conscious but passive anal relaxation should be alternately executed.

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

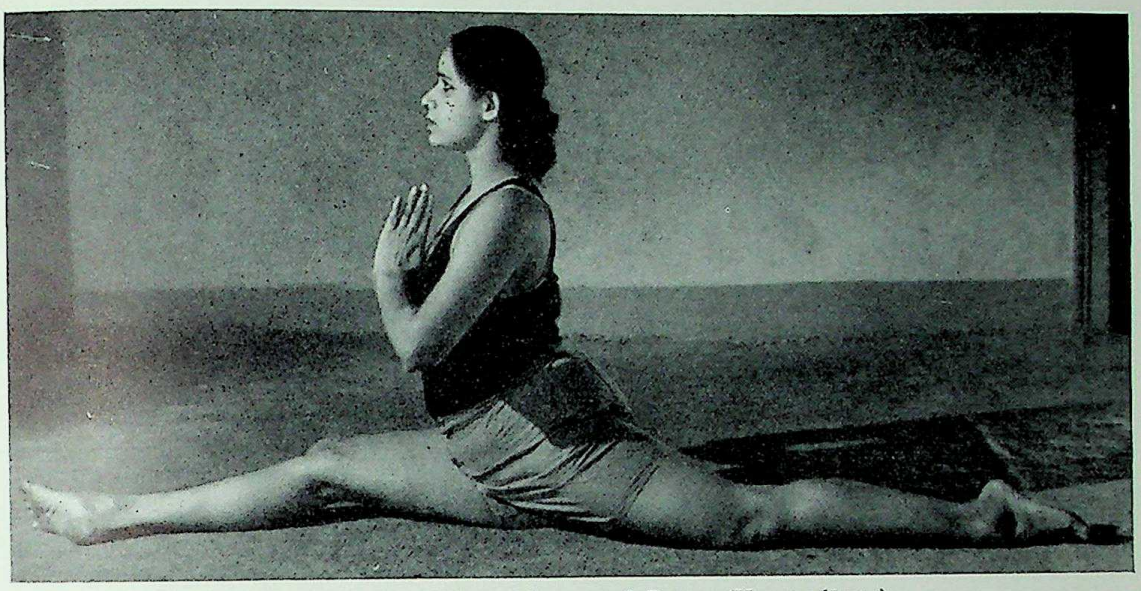


FIG. 69. Backward-forward Leg-stretch Posture (Hanumadāsana).

Static Application: None.

Relaxation: Relax fully the pelvic region in Accomplished Posture, Pleasant Posture, or in a sitting posture with the legs extended in front and the arms by the sides, after completion of the exercise.

Remark: Before doing this exercise the bladder and the bowels should be evacuated. The best time to practise this exercise is in the morning. The next best time is in the evening. The colon should be generally maintained healthy and clean by internal baths, laxative diet and other hygienic measures.

2. *Anal-lock Act*

Stage 1: Sit in Accomplished Posture (Fig. 105) or Pleasant Posture (Fig. 107).

Stage 2: Contract consciously and powerfully the anus as in Anal Act, and retain the anal contraction as per instruction. Repeat as per instruction.

Stage 3: After retention relax consciously the anus. Do not force the anus out voluntarily during relaxation.

Breathing: Normal.

Concentration: On the anal contraction, retention and relaxation.

Dynamic Application: None.

Static Application: Anal contraction should be retained as per instruction.

Relaxation: As in Anal Act.

Remark: Same as in Anal Act.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XVII

Pectoral Limb Posture Exercise

THE muscles concerned in the movements of the arm at the shoulder joint (scapulohumeral articulation), the shoulder girdle (acromioclavicular and sternoclavicular articulations), the forearm at the elbow and radio-ulnar joints, and the wrist and fingers are the pectoral limb muscles. Special exercises have been developed in Yoga for the exercise of the muscles of these joints. These exercises are included in Contraction System. The pectoral limb muscles can be exercised in a more general but effective manner by the posture exercises presented here.

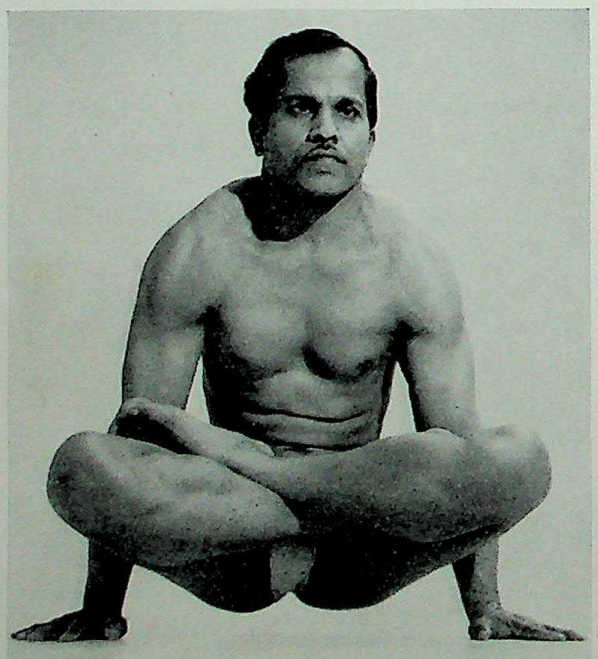


FIG. 70. Risen Lotus Posture (Utthita Padmāsana).

1. *Risen Lotus Posture*

Stage 1: Assume Lotus Posture (Fig. 106) with the arms by the sides and the palms on the floor.

Stage 2: Raise the body (the buttocks, thighs and knees) off the floor, supporting it on the palms. Maintain the final attitude for a few seconds. During the movement and the maintenance of the attitude contract the trapezius consciously (Fig. 70).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the trapezius muscle.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Lotus Posture or the sitting posture with the legs extended forward and the arms by the sides, after completion of the exercise.

2. *Cock Posture*

Stage 1: Assume Lotus Posture (Fig. 106).

Stage 2: Introduce the right arm into the space formed between the right thigh and calf and bring the hand and wrist out of the thigh and calf. In a similar manner bring the left hand and wrist out. Now place the palms on the floor and raise the body (the buttocks, thighs and knees) off the floor. Maintain the final attitude for a few seconds. During the upward movement of the body and the maintenance of the attitude contract the trapezius consciously (Fig. 71).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 3: Return to stage 1.
Breathing: Normal.
Concentration: On the trapezius muscle.
Dynamic Application: Stages 2 and 3 should be alternately executed.
Static Application: Maintain the final attitude (stage 2) as per instruction.
Relaxation: As in Risen Lotus Posture.

3. *One-arm Cock Posture*

Stage 1: Assume Lotus Posture (Fig. 106).
Stage 2: Introduce the right arm into the space formed between the left thigh and calf and get the hand and wrist out of the thigh and calf. Now place the right palm on the floor and raise the body off the floor by supporting it on the right arm. Maintain the final attitude for a few seconds. During the movement and the maintenance of the attitude contract the trapezius consciously (Fig. 72).
Stage 3: Return to stage 1.
Stage 4: In a similar manner (stage 2) raise the body on the left arm.
Stage 5: Return to stage 1.
Breathing: Normal.
Concentration: On the trapezius muscle.
Dynamic Application: Stages 2 and 3 and 4 and 5 should be alternately executed.
Static Application: Maintain the final attitude (stages 2 and 4) as per instruction.
Relaxation: As in Risen Lotus Posture.
Remark: It is an advanced exercise requiring powerful muscular action, especially of the shoulder region, and also balance.

4. *Quadruped Posture*

Stage 1: Assume prone-lying position with the palms placed approximately at the shoulder width on the floor, the fingers facing forward, the toes on the floor.
Stage 2: Raise the body off the floor supporting it on the palms and toes and keeping it straight.
Stage 3: Press the body up to full arms' length. Maintain the final attitude for a few seconds (Fig. 73).
Stage 4: Return to stage 2, keeping the body straight.
Breathing: Inhale in stage 3 and exhale in stage 4.
Concentration: Especially on the triceps, pectoralis major and serratus anterior.

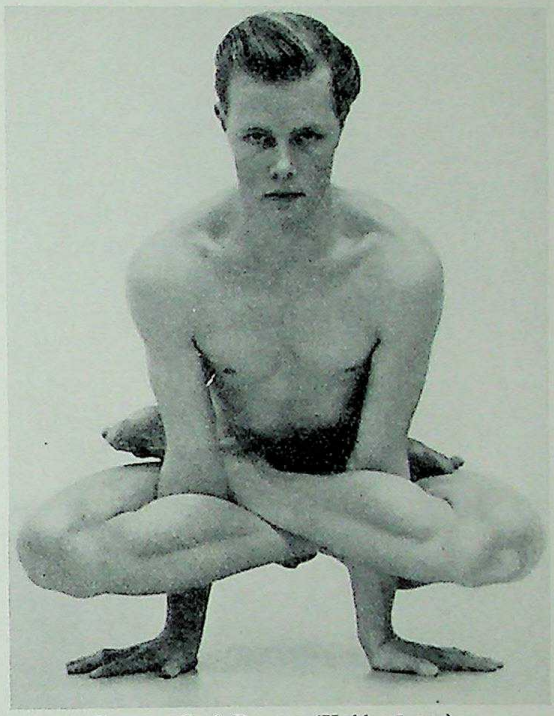


FIG. 71. Cock Posture (Kukkuṭāsana).

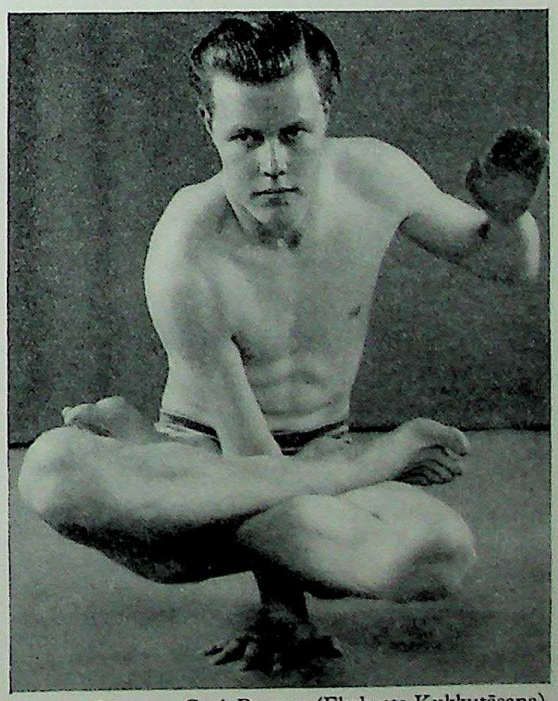


FIG. 72. One-arm Cock Posture (Ekahasta Kukkuṭāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Maintain the final attitude (stage 3) as per instruction.

Relaxation: In Prone-lying Posture, after completion of the exercise.

Remark: For the special development of the pectoralis major, the hands should be placed far apart instead of keeping them at the shoulder width. Gradually the distance between the hands may be made greater by placing them more and more apart.

Breathing: Exhale in stage 3, inhale in stage 4.

Concentration: Specially on the triceps.

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Not suitable.

Relaxation: In Prone-lying Posture or Corpse Posture, after completion of the exercise.

Remark: It is an advanced exercise for developing the arm muscles, especially the triceps.

This exercise has two other forms:

(1) Keeping the body supported on one arm and both legs, and grasping the elbow of the supporting arm with the other hand by bringing the arm behind the back, lower the body and touch the fingers of the supporting arm with the face by a twisting movement. Then straighten the supporting arm. Repeat and then perform the movement on the other arm.

(2) Keeping the body supported on both arms and one leg, raising the other leg off the floor and keeping it suspended in the air, lower the body until the chest nearly touches the floor. Then push up the body by straightening the arms. Keep the non-supporting leg suspended throughout the movements. Repeat and then perform the movements while keeping the other leg suspended.

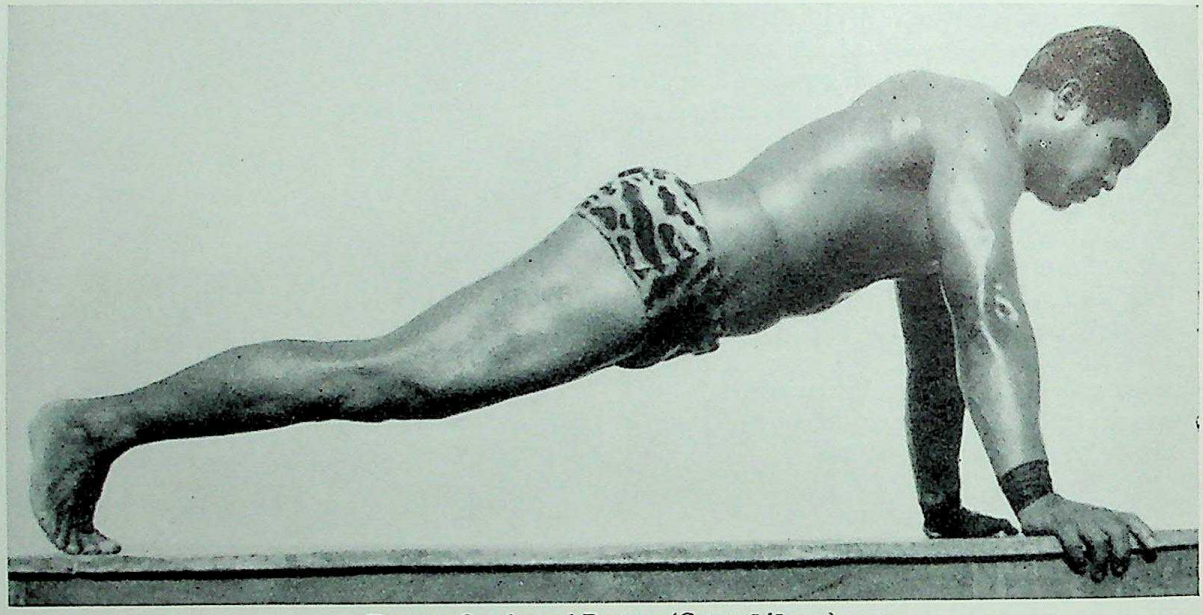


FIG. 73. Quadruped Posture (Catuṣpādāsana).

5. *Three-footed Posture*

Stage 1: Assume prone-lying position with the palms placed approximately at the shoulder width. Press the body up to full arms' length.

Stage 2: Bring the right arm behind the back, supporting the body on the left arm and both feet.

Stage 3: Lower the body until the chest nearly touches the floor, by bending at the left elbow and keeping the body straight. Now the body remains suspended on the left hand and both feet.

Stage 4: Push up the body by straightening the left arm (Fig. 74).

Stage 5: Make the similar movement on the right arm.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

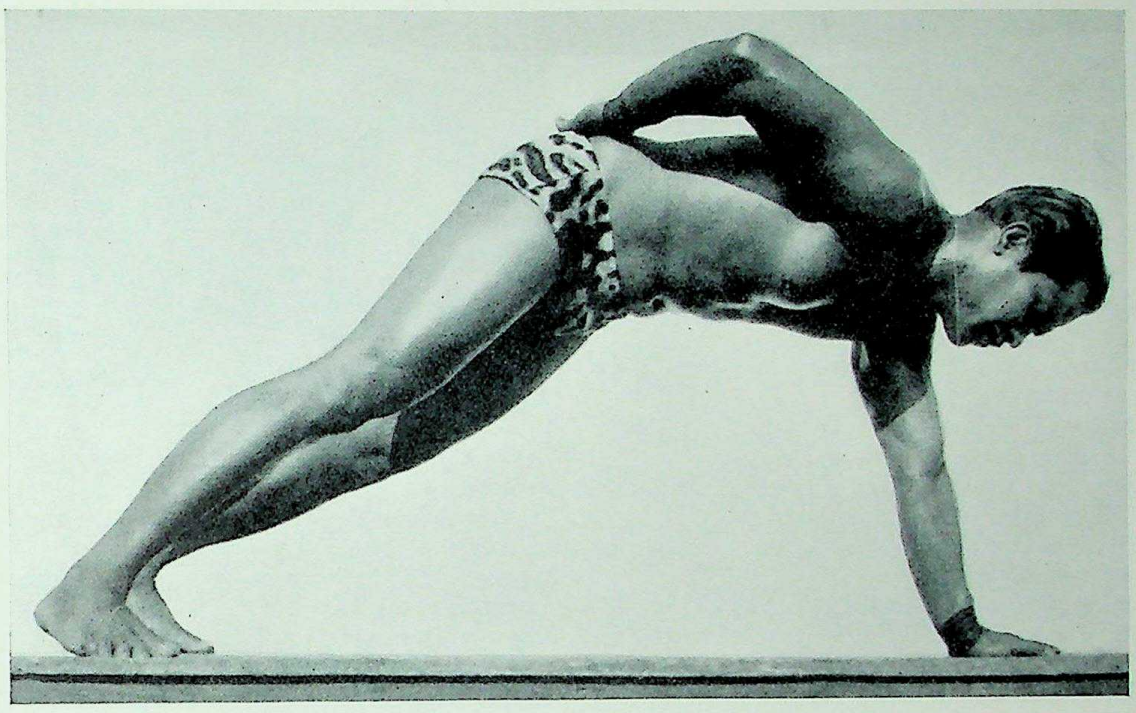


FIG. 74. Three-footed Posture (Tripadāsana).

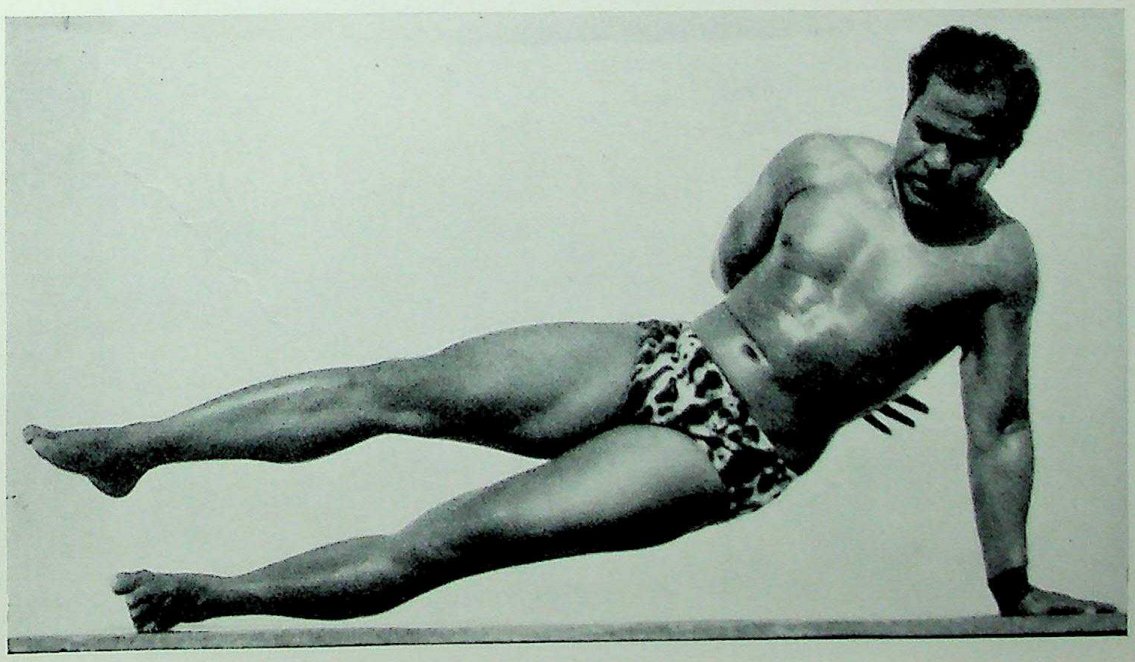


FIG. 75. Arm-leg Posture (Bāhu-pādāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

6. *Arm-leg Posture*

Stage 1: Assume prone-lying position with the palms placed approximately at the shoulder width. Press the body up to full arms' length.

Stage 2: Bring the right arm behind the back and raise the right leg off the floor and keep it suspended, leaning on the left side and maintaining the weight of the body on the left arm and leg.

Stage 3: Lower the body by bending the left elbow until it almost touches the floor.

Stage 4: Push the body up by straightening the left arm (Fig. 75).

Stage 5: Perform the movement in a similar manner on the opposite arm and leg.

Breathing: Exhale in stage 3, inhale in stage 4.

Concentration: Specially on the triceps.

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Not suitable.

Relaxation: In Prone-lying Posture or Corpse Posture, after completion of the exercise.

Remark: It is an advanced exercise for developing the arm muscles, especially the triceps.

7. *Opposite Arm-leg Posture*

Stage 1: Assume prone-lying position with the palms placed approximately at the shoulder width. Push the body up to full arms' length.

Stage 2: Bring the left arm behind the back and raise the right leg off the floor, supporting the body on the right arm and the left leg.

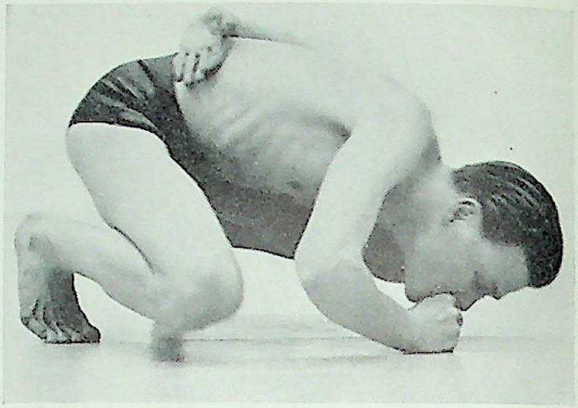


FIG. 77. Arm Posture (Praganḍāsana).

Stage 3: Lower the body by bending the right elbow until it nearly touches the floor.

Stage 4: Push the body up by straightening the right arm (Fig. 76).

Stage 5: Perform the movement in a similar manner on the left arm and the right leg.

Breathing: Exhale in stage 3, inhale in stage 4.

Concentration: Especially on the triceps.

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Not suitable.

Relaxation: In Prone-lying Posture or Corpse Posture, after completion of the exercise.

Remark: It is an advanced exercise for developing the arm muscles, especially the triceps.

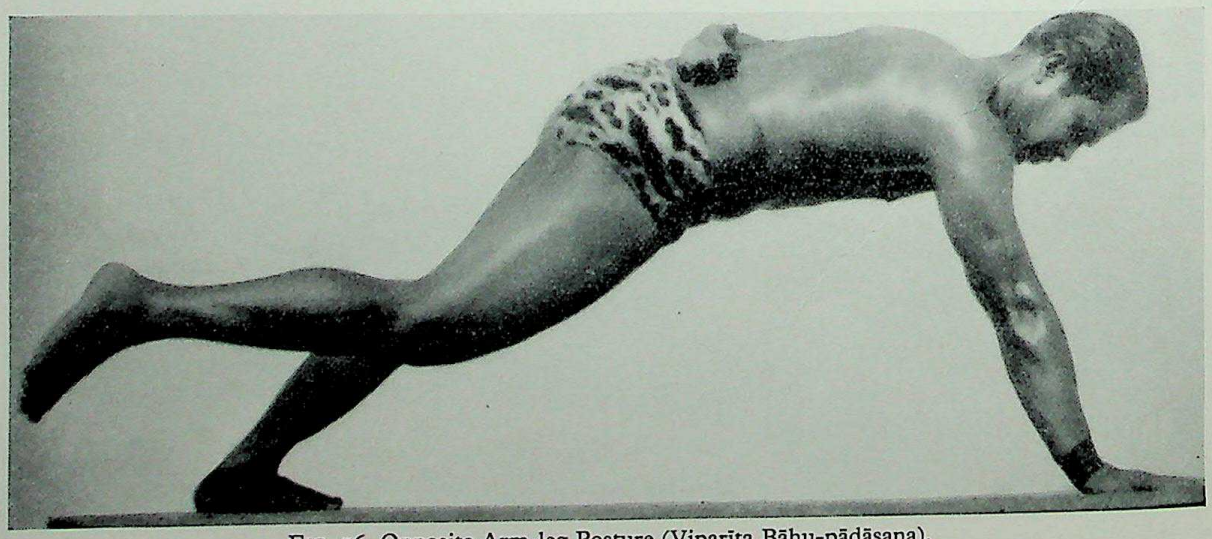


FIG. 76. Opposite Arm-leg Posture (Viparīta Bāhu-pādāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

8. *Arm Posture*

Stage 1: Assume Squat Posture, extend the right arm in front and place the fist on the floor, the distance being about 27 inches from the right toes, the left arm being placed behind the back.

FIG. 78. Arm Motion (Bāhu-cāraṇā).

Stage 2: Bend the head and the body towards the right fist until the face touches the top of the fist by bending at the right elbow, and without allowing the knees to touch the floor (Fig. 77).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner with the left arm.

Breathing: Normal.

Concentration: On the arm muscles, especially the triceps.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Not suitable.

Relaxation: In the sitting position with the legs extended in front and the arms by the sides, after completion of the exercise.

Remark: It is an advanced exercise for the pectoral limb muscles, especially the triceps.

9. *Arm Motion*

Stage 1: Assume Accomplished Posture (Fig. 105) or Pleasant Posture (Fig. 107) with the arms extended sideward at the shoulder level, the palms upward, the hands clenched.

Stage 2: Contract the arm muscles and bring both fists simultaneously close to the shoulders, bending at the elbows and raising the elbows high enough from the shoulder level to secure the full contraction of the biceps. Maintain the attitude for a few seconds (Fig. 78).

Stage 3: Extend both arms simultaneously to the starting position (stage 1), maintaining the contraction of the arm muscles.

Breathing: Inhale in stage 2, exhale in stage 3.

Concentration: On the biceps.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Not suitable.

Relaxation: In the sitting position with the legs extended forward and the arms by the sides, after completion of the exercise.

Remark: This exercise can also be performed in Standing Posture. It is not a posture exercise, but an exercise included in Contraction System. It is especially for the development of the biceps muscle. When the fists are close to the shoulders and the elbows are raised high from the shoulder level, an additional effort should be made to contract the biceps more powerfully to secure the full contraction. This additional contraction should be maintained for a few seconds before extending the arms to the starting position.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XVIII

Pelvic Limb Posture Exercise

THE muscles acting on the hip joint, the knee joint, the ankle joint and the foot are the pelvic limb muscles. A systematized form of exercise for these muscles is included in Contraction System. We are presenting here the posture exercise for the pelvic limb muscles.

These exercises are not only important for the development of the pelvic limb muscles but for maintaining efficient circulation and heart action and increasing the vital vigour. These exercises have also especial value. They are designed to counteract the unhealthful effects of a prolonged folded-leg posture required in concentration.

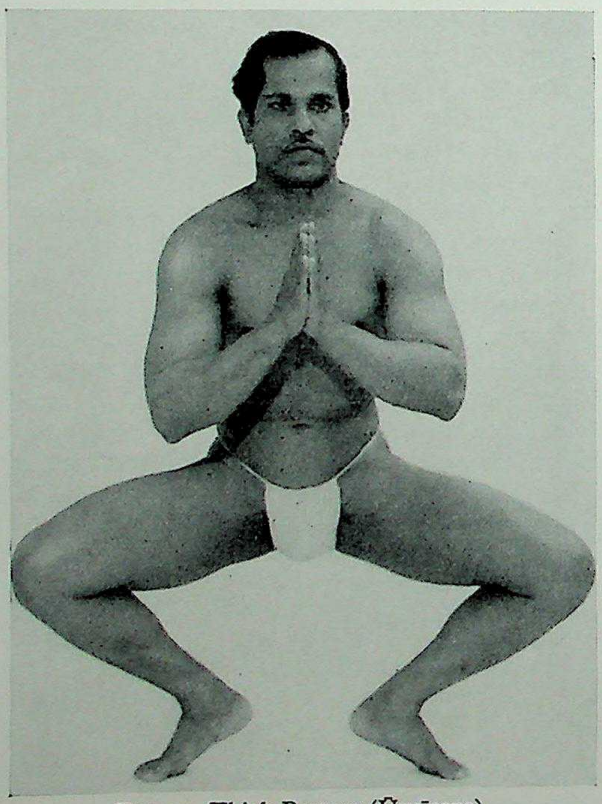


FIG. 79. Thigh Posture (Ūrvāsana).

1. *Thigh Posture*

Stage 1: Assume Squat Posture with the feet about 6 inches apart and the hands folded at the chest.

Stage 2: Raise the heels high and straighten the body to a standing position (Fig. 79).

Stage 3: Lower the body to stage 1.

Breathing: Inhale in stage 2, exhale in stage 3.

Concentration: On the thigh muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Not necessary.

Relaxation: In Standing Posture, after completion of the exercise.

Remark: This exercise is also called Squat Posture.

2. *Knee-touching Thigh Posture*

Stage 1: Stand with the feet apart, the hands folded at the chest or on the hips.

Stage 2: Raise the heels high and lower the body to a squatting position, bringing the knees in contact with each other when squatting is made. Maintain the final attitude for a few seconds (Fig. 80).

Stage 3: Return to stage 1 by straightening the legs.

Breathing: Exhale in stage 2, inhale in stage 3.

Concentration: On the thigh muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Remark: This exercise can also be performed with a short jump to stimulate more vigorously the heart and lungs. It is done as follows:

FIG. 80. Knee-touching Thigh Posture (Jānuspṛiṣṭa Ūrvāsana).

Stage 1: Stand with the feet together, the hands folded at the chest or on the hips.

Stage 2: Squat fully with a short forward jump, bringing the feet apart and bringing the knees in contact with each other when squatting is made—exhaling.

Stage 3: Return to stage 1 with a short backward jump—inhaling.

3. *Feet-extending Thigh Posture*

Stage 1: Stand with the right leg extended forward as much as possible, the hands either folded at the chest or on the waist.

Stage 2: Raise the heels off the ground and bend the right leg at the knee until you almost sit on the right heel, the weight of the body mainly on the bent leg. The left leg should be kept straight throughout the movement. Maintain the final attitude for a few seconds (Fig. 81).

Stage 3: Return to stage 1 by straightening the right leg.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the left leg.

Breathing: Exhale in stage 2, inhale in stage 3.

Concentration: On the thigh muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

4. *Sideward Feet-extending Thigh Posture*

Stage 1: Stand with the legs well spread sideward, the hands either folded at the chest or on the waist.

Stage 2: Bend the right leg at the knee, raising

FIG. 81. Feet-extending Thigh Posture (Pādaprasāraṇa Ūrvāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the right heel off the floor, and sit on the elevated heel. The left leg should be kept straight throughout the movement. Maintain the final attitude for a few seconds (Fig. 82).

Stage 3: Return to stage 1 by straightening the right leg, keeping the left leg straight.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the left leg.

Breathing: Exhale in stage 2, inhale in stage 3.

Concentration: On the thigh muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

5. *Leg-raise Thigh Posture*

Stage 1: Stand on the right leg with the left leg stretched forward at a right angle to the body, the hands folded at the chest.

Stage 2: Lower the body to a squatting position by bending the right leg at the knee, keeping the left leg straight. Maintain the attitude for a few seconds (Fig. 83).

Stage 3: Return to stage 1 by straightening the right leg.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the opposite leg.

Breathing: Exhale in stage 2, inhale in stage 3.

Concentration: On the thigh muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

FIG. 82. Sideward Feet-extending Thigh Posture (Pārśva Pādaprasāraṇa Ūrvāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Static Application: Maintain the final attitude (stage 2) as per instruction.
Relaxation: In Standing Posture, after completion of the exercise.

6. *One-legged Squat Posture*

Stage 1: Assume Squat Posture with the body erect, the heels either raised or on the floor, the right foot placed on the left thigh bending at the knee, the hands either folded at the chest or on the waist.
Stage 2: Raise the body to a standing position by straightening the left leg (Fig. 84).
Stage 3: Return to stage 1 by bending the left leg at the knee.
Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the opposite leg.
Breathing: Inhale in stage 2 and exhale in stage 3.
Concentration: On the thigh muscles.
Dynamic Application: Stages 2 and 3 should be alternately executed.
Static Application: None.
Relaxation: In Standing Posture, after completion of the exercise.

FIG. 83. Leg-raise Thigh Posture (Pādotthita Ūrvāsana).

FIG. 84. One-legged Squat Posture (Pādāṅguṣṭhāsana).

7. *Toe Posture*

Stage 1: Assume the squatting position with the hands folded at the chest, the feet about 6 inches apart.
Stage 2: Raise the heels on your toes as high as you can. Maintain the final attitude for a few seconds (Fig. 85).
Stage 3: Return to stage 1 by lowering the heels on the floor.
Breathing: Normal, or inhale in stage 2, exhale in stage 3.
Concentration: On the calf muscles.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

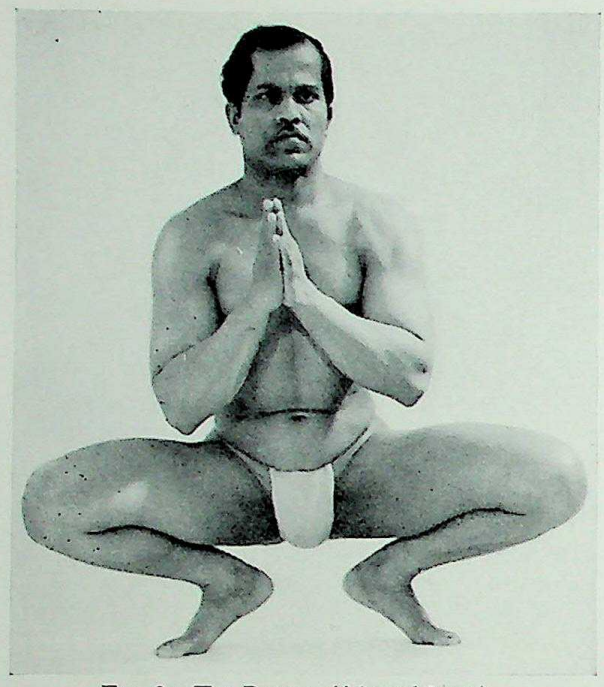


FIG. 85. Toe Posture (Aṅguṣṭhāsana).

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

Remark: After raising the heels to a high degree, try to raise them still further.

8. *One-legged Toe Posture*

Stage 1: Assume the squatting position with the right foot placed on the left thigh bending at the knee, the hands either folded at the chest or on the waist.

Stage 2: Raise the left heel on your left toes as high as you can. Maintain the final attitude for a few seconds (Fig. 86).

Stage 3: Return to stage 1 by lowering the left heel on the floor.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the opposite leg.

Breathing: Normal, or inhale in stage 2, exhale in stage 3.

Concentration: On the calf muscles.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

Remark: It is an advanced exercise for the calf muscles. After raising the heel to a high degree, try to raise it still further.

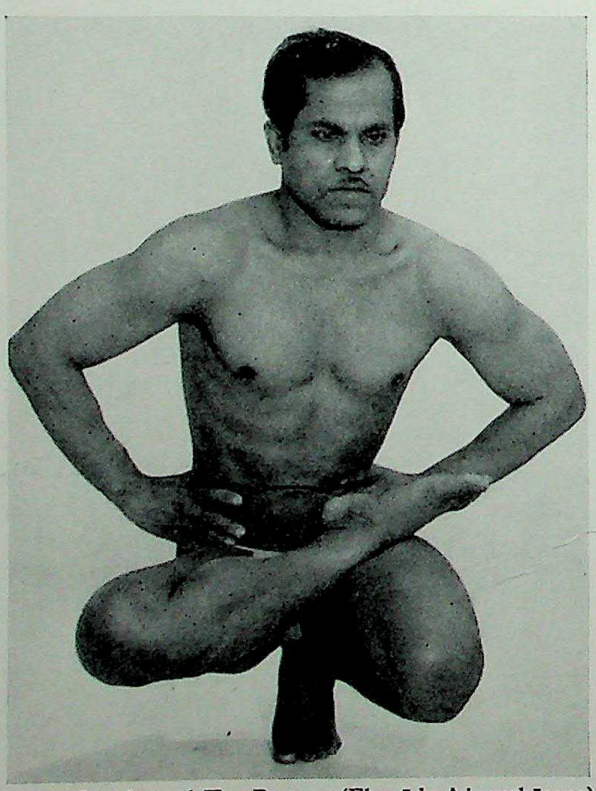


FIG. 86. One-legged Toe Posture (Ekapāda Aṅguṣṭhāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XIX

Balance Posture Exercise

BALANCE posture exercise consists of postures requiring balance. In this type of exercise the retina of the eye, the muscle spindles, the semicircular canals, the cerebellum and the cerebral cortex are involved and educated. The nervous system is strengthened and the neuromuscular control is developed. This type of exercise also plays a part in improving the general physical condition. Its special significance in Yoga is that it develops will-power and concentration. During exercise the mind should be concentrated on the movement, especially on the final attitude. The real value of the balance posture exercise lies in its static form. Dynamic form is useful in the preliminary stages when the movements are being mastered.

The exercises are as follows:

1. *Eagle Posture*

Stage 1: Stand erect with the heels together, the arms by the sides.

Stage 2: Raise the right leg, bring the right thigh to the left side of the left thigh by crossing it in front and have the right leg encircle the left one, on which you are standing. Now bring the arms in front of the body and let one arm encircle the other, the palms close to each other. Maintain the final attitude (Fig. 87).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the other leg.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

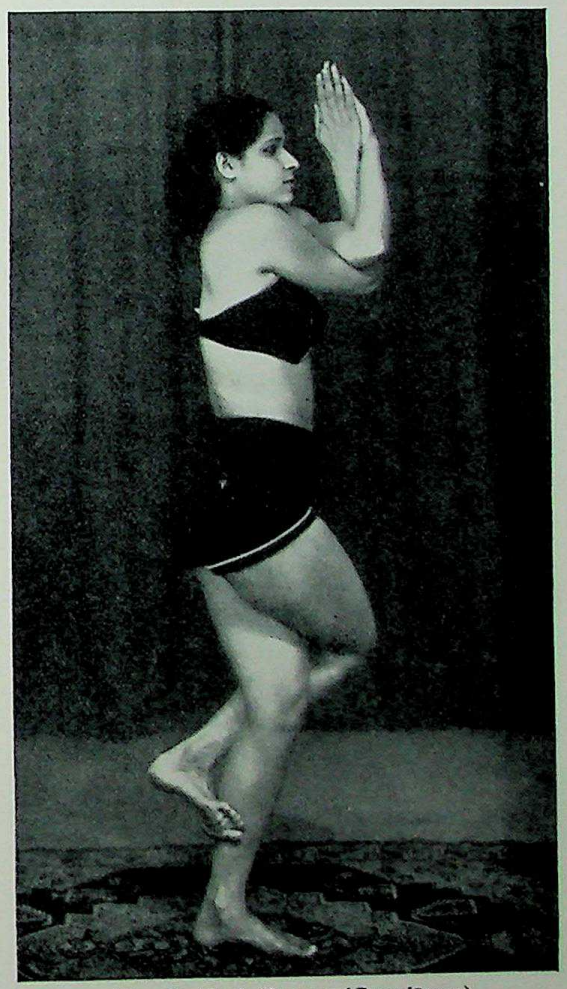


FIG. 87. Eagle Posture (Garuḍāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

2. *Standing Head-knee Posture*

Stage 1: Stand erect with the heels together, the arms by the sides.

Stage 2: Raise the left leg forward horizontally, standing on the right leg. Then bend the body forward, hold the left toes with both hands and touch the left knee with the forehead. Maintain the final attitude (Fig. 88).

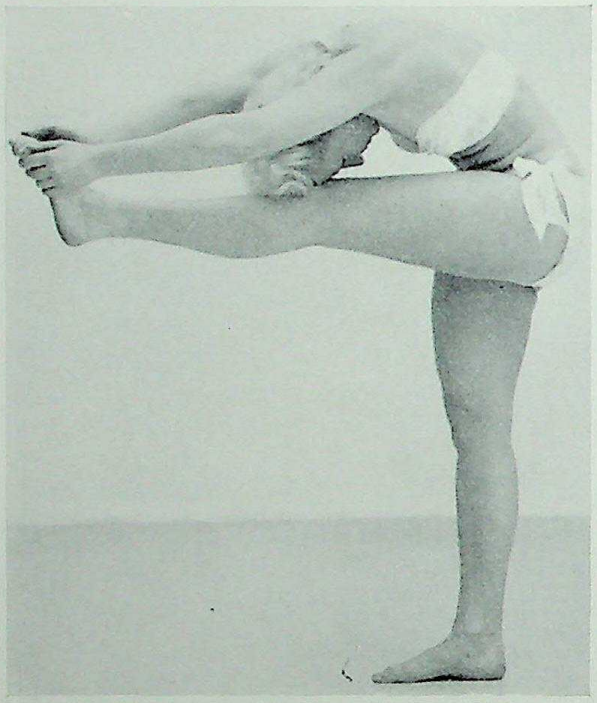


FIG. 88. Standing Head-knee Posture (Uttha Jānuśirāsana).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the opposite leg.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

3. *Wing Posture*

Stage 1: Stand erect with the heels together, the arms by the sides.

Stage 2: Raise the right leg sideward horizontally, standing on the left leg. Now stretch the right arm sideward and hold the right toes with the right hand. Maintain the final attitude for a few seconds (Fig. 89).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the opposite leg.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

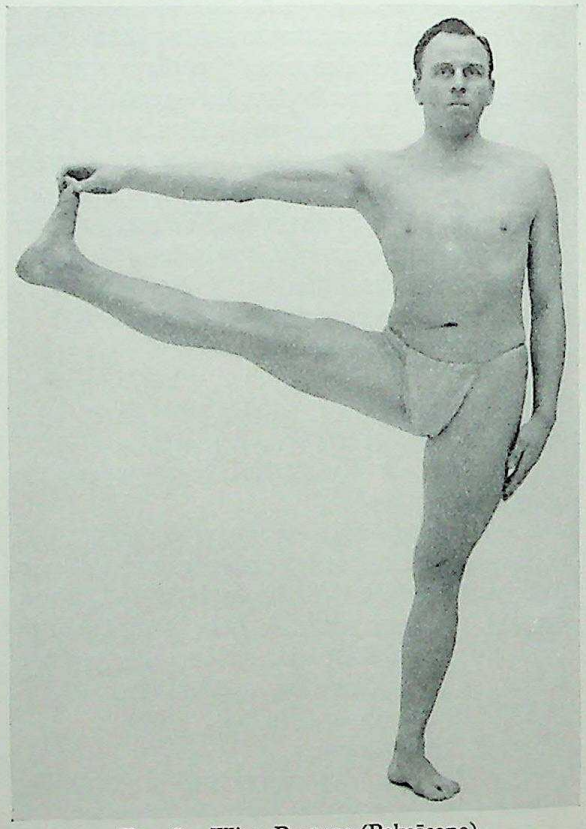


FIG. 89. Wing Posture (Pakṣāsana).

4. *Bent-head Wing Posture*

Stage 1: Stand erect with the heels together, the arms by the sides.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 2: Raise the right leg sideward horizontally, standing on the left leg. Now bend the body sideward, hold the right toes with the right hand and bend the forehead to the right knee. Maintain the final attitude (Fig. 90).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the opposite leg.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

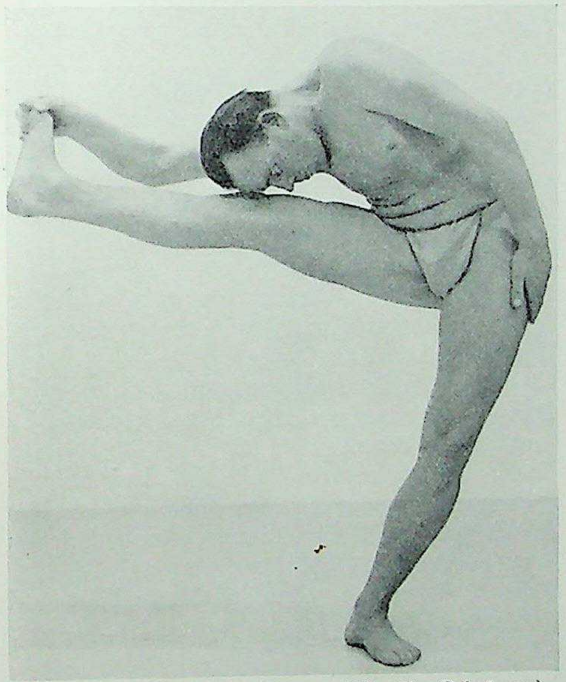


FIG. 90. Bent-head Wing Posture (Nataśira Pakṣāsana).

5. *Knee-heel Posture*

Stage 1: Stand erect with the heels together, the arms by the sides.

Stage 2: Raise the right leg and place the right foot on the left groin or the upper part of the left thigh, and keep the hands folded at the chest.

Stage 3: Raise the left heel off the floor and slowly bend the left leg at the knee, either sideward or forward, finally allowing the right knee to touch the left heel or ankle. The left heel may also be kept flat on the floor during the movement. Maintain the final attitude for a few seconds (Fig. 91).

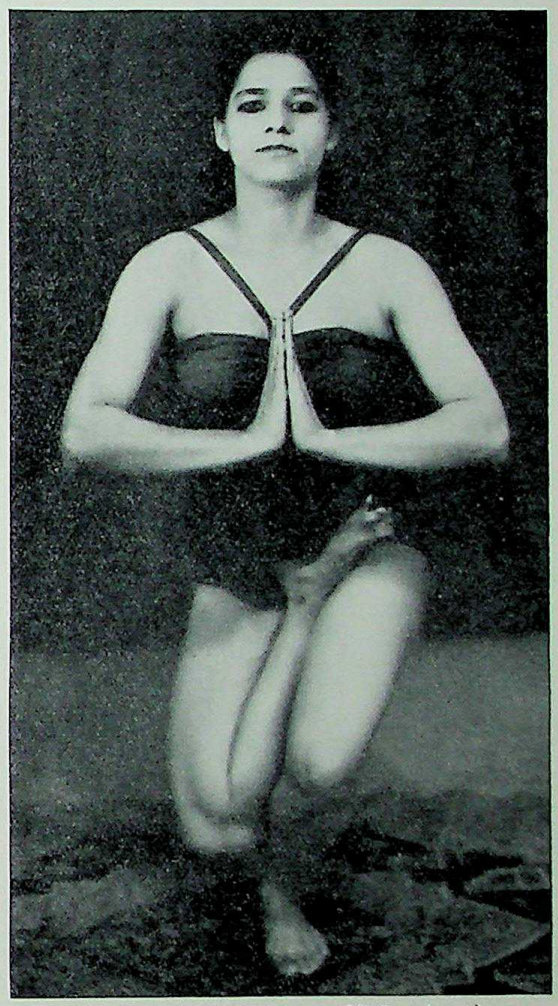


FIG. 91. Knee-heel Posture (Vātāyanāsana).

Stage 4: Return to stage 2.

Stage 5: Perform the movement in a similar manner (stages 3 and 4) with the other leg.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 3 and 4 should be alternately executed.

Static Application: Maintain the final attitude (stage 3) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

6. *Standing Single Foot-head Posture*

Stage 1: Stand erect, the heels together, the arms by the sides.

Stage 2: Place with the help of the hands the left leg across the neck by making the left thigh stand almost vertically. Now remove the hands from the neck, place them on the right thigh and try to raise the body as much upright as possible, standing on the right leg. Maintain the final attitude for a few seconds (Fig. 92).

FIG. 92. Standing Single Foot-head Posture (Uttha Ekapāda Śirāsana).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the opposite leg.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

Remark: This exercise requires relaxation of the hamstring muscles and flexibility of the hip joint to a remarkable extent. The practice of the exercise develops them.

7. *Standing Leg-stretch Posture*

Stage 1: Stand erect with the heels together and the arms by the sides.

Stage 2: Raise the right leg almost vertically, holding the right toes with both hands and standing on the left leg. Try to make the elevated leg as much vertical as possible by a backward pull of the leg with the hands. Maintain the final attitude for a few seconds (Fig. 93).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the opposite leg.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

Remark: Same as in Standing Single Foot-head Posture.

8. *Mountain Posture*

Stage 1: Assume Lotus Posture (Fig. 106).

Stage 2: Stand on the knees and either stretch the arms above the head or keep the hands folded at the chest. Maintain the final attitude for a few seconds (Fig. 94).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

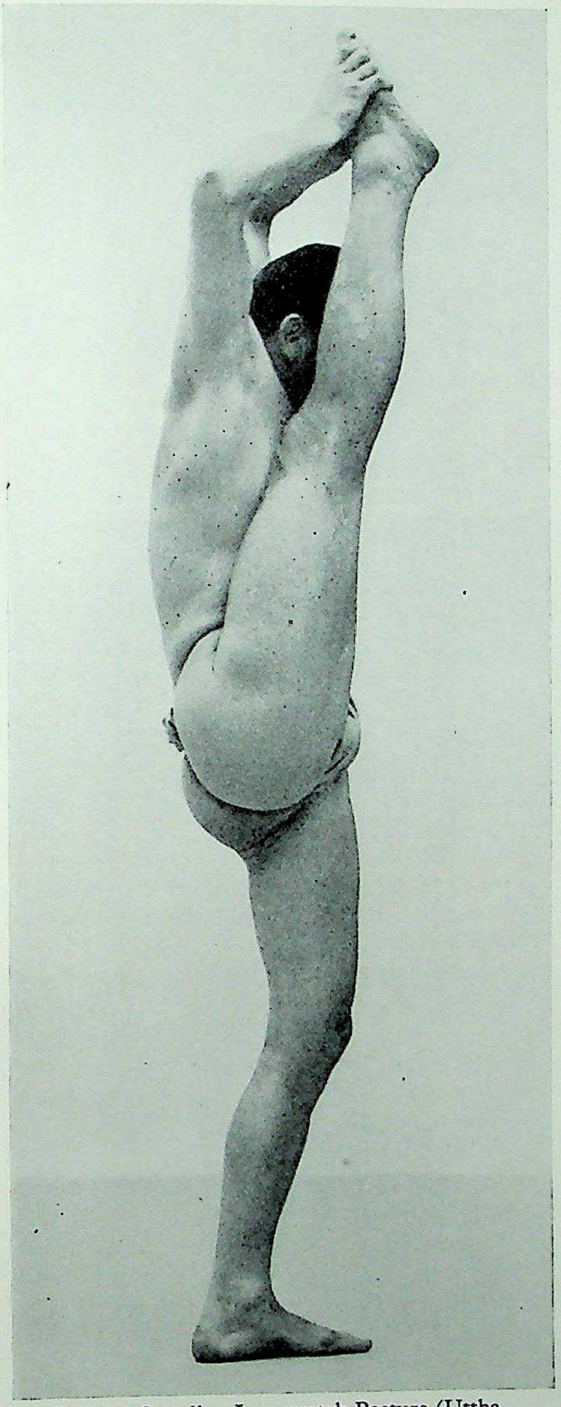


FIG. 93. Standing Leg-stretch Posture (Uttha Pādaprasāraṇāsana).

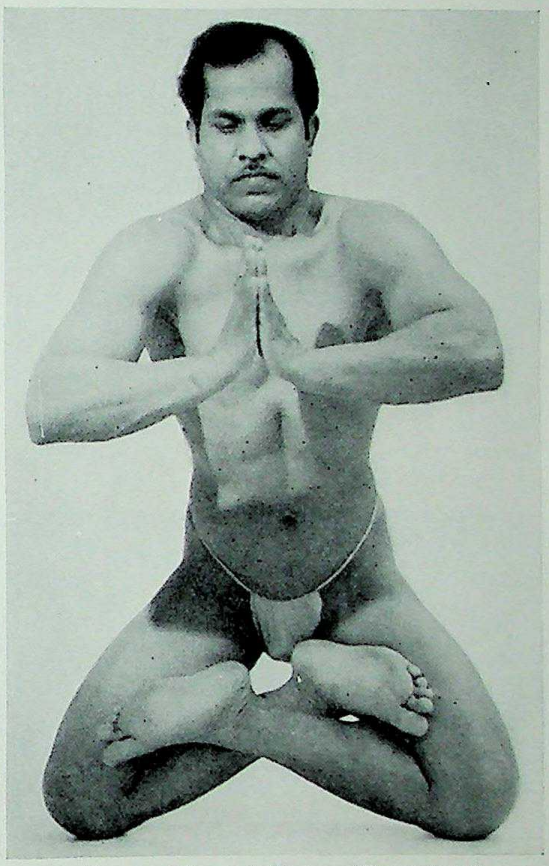


FIG. 94. Mountain Posture (Parvatāsana).

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In a sitting position with the legs extended forward and the arms by the sides.

9. *Peacock Posture*

Stage 1: Assume a kneeling position with the knees sufficiently apart. Place the palms in front of you on the floor and between the knees with the fingers directed towards you, keeping the forearms vertical and leaning forward. The palms and forearms should be kept close to each other.

Stage 2: Bending forward, place your abdomen, just below the umbilicus, on the elbow joints which will act as a fulcrum, and then extend the body forward and the legs backward. The whole body is thus balanced on the elbow joints.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

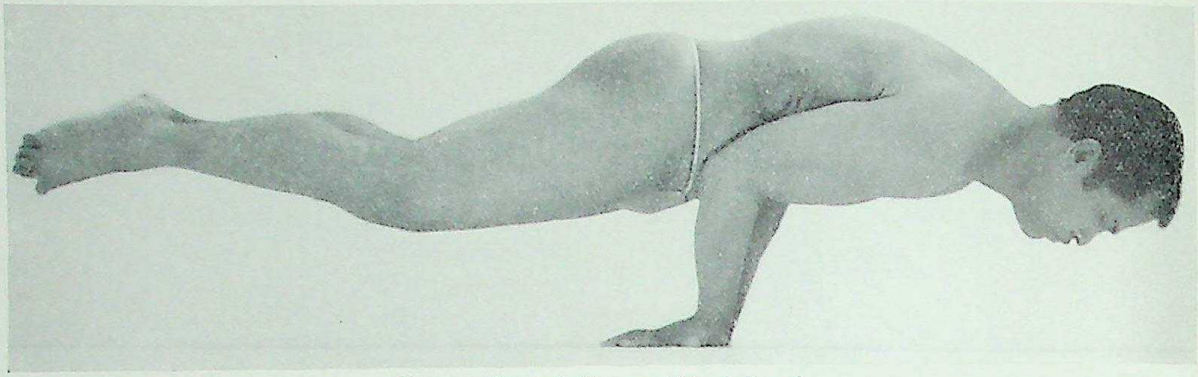


FIG. 95. Peacock Posture (Mayūrāsana).

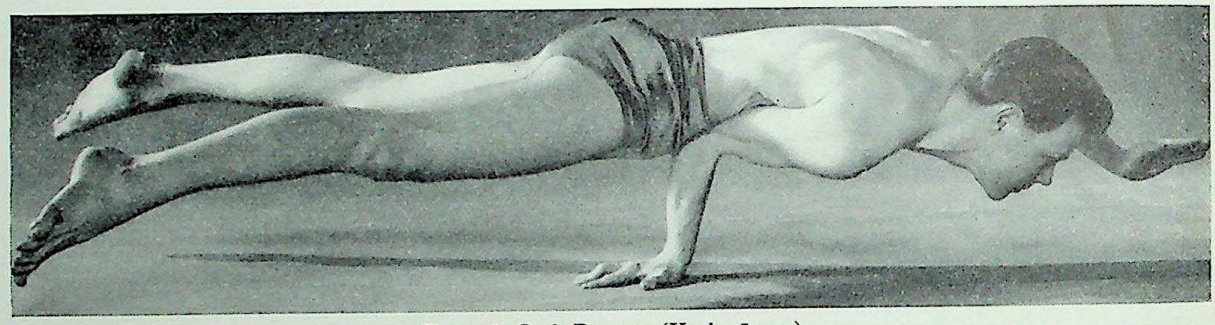


FIG. 96. Crab Posture (Karkaṭāsana).

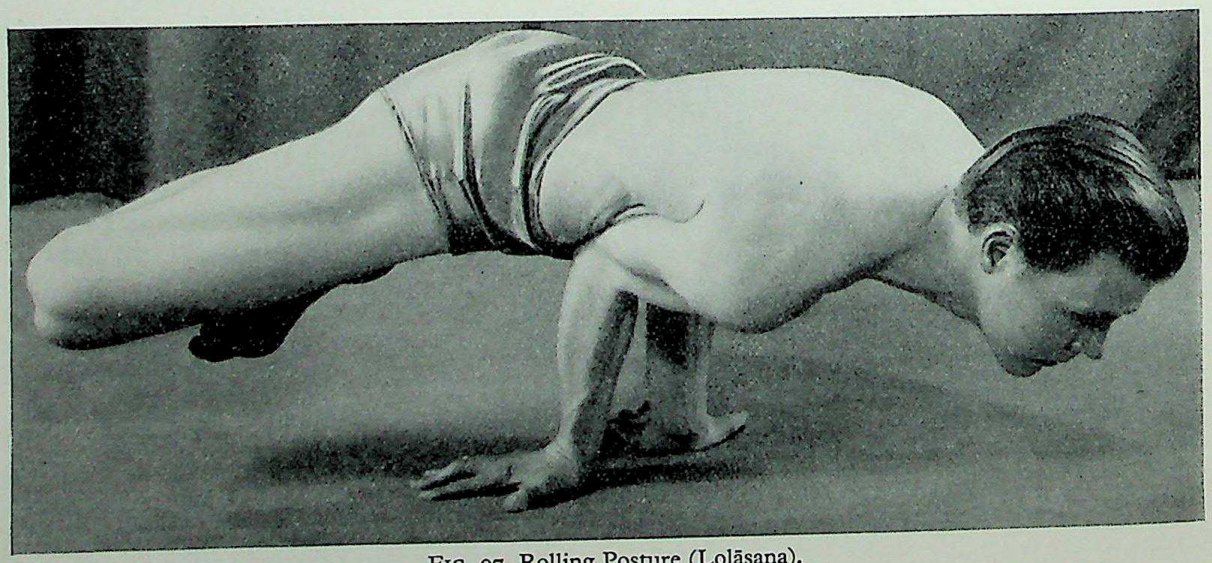


FIG. 97. Rolling Posture (Lolāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The extended legs are kept close together. Maintain the final attitude for a few seconds (Fig. 95).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: Either in Prone-lying Posture or Corpse Posture, after completion of the exercise.

10. *Crab Posture*

Stage 1: Assume a kneeling position and place in front of you the right palm with the fingers directed towards you on the floor, the right forearm vertical.

Stage 2: Bending forward, place your abdomen on the right elbow joint and extend your body forward and the legs backward, thus making the body balanced on the elevated elbow with the legs apart and the left arm suspended. Maintain the final attitude for a few seconds (Fig. 96).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner (stages 2 and 3) with the other arm.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: As in Peacock Posture.

11. *Rolling Posture*

Stage 1: Assume Lotus Posture (Fig. 106), stand on the knees and leaning forward place the palms in front of you with the fingers directed towards you on the floor, the forearms vertical, the palms and forearms close together.

Stage 2: Bending forward, place your abdomen on the elbow joints and balance the body as in Peacock Posture. Maintain the final attitude for a few seconds (Fig. 97).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: As in Peacock Posture.

12. *One-arm Rolling Posture*

Stage 1: Assume Lotus Posture (Fig. 106) and place in front of you the right palm with the fingers directed towards you on the floor, the right forearm vertical.

Stage 2: Bending forward, place your abdomen on the right elbow and balance your body as in Rolling Posture with the left arm on the back. Maintain the final attitude for a few seconds (Fig. 98).

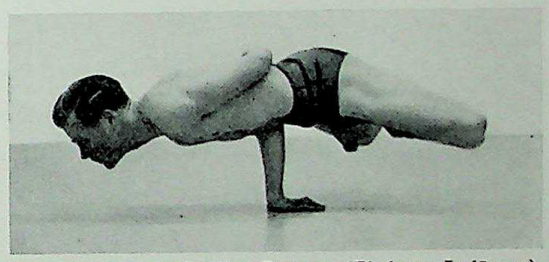


FIG. 98. One-arm Rolling Posture (Ekahasta Lolāsana).

Stage 3: Return to stage 1.

Stage 4: Perform the movement in a similar manner (stage 2) with the other arm.

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: As in Peacock Posture.

13. *Arm-stand Posture*

Stage 1: Stand erect, the arms by the sides.

Stage 2: Bend your body forward and downward, place the palms, one upon the other, on the floor in front of you and raise the legs and the trunk with some force upward, making the body stand inversely in a straight line with the head down and the legs stretched upward and straight, the heels together, the arms straight. Maintain the position for a few seconds (Fig. 99).

Stage 3: Return to stage 1.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

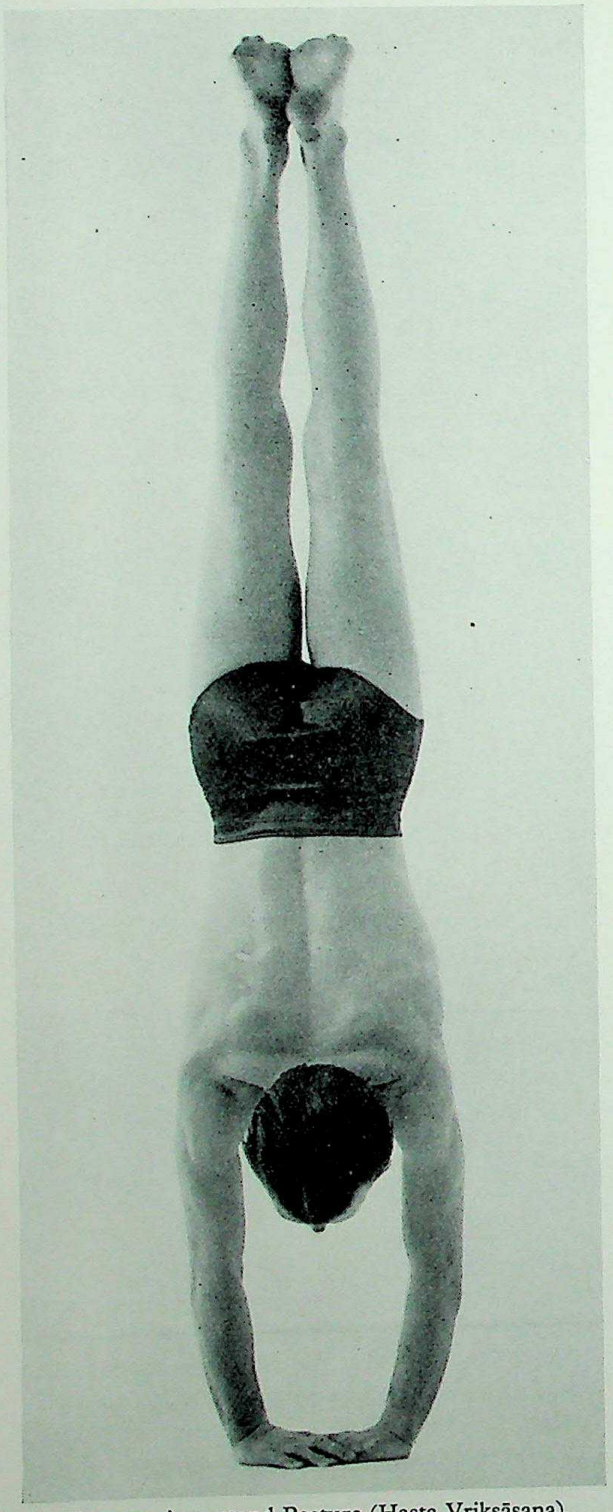


FIG. 99. Arm-stand Posture (Hasta Vṛikṣāsana).

Breathing: Normal.

Concentration: On the movement.

Dynamic Application: Stages 2 and 3 should be alternately executed.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Standing Posture, after completion of the exercise.

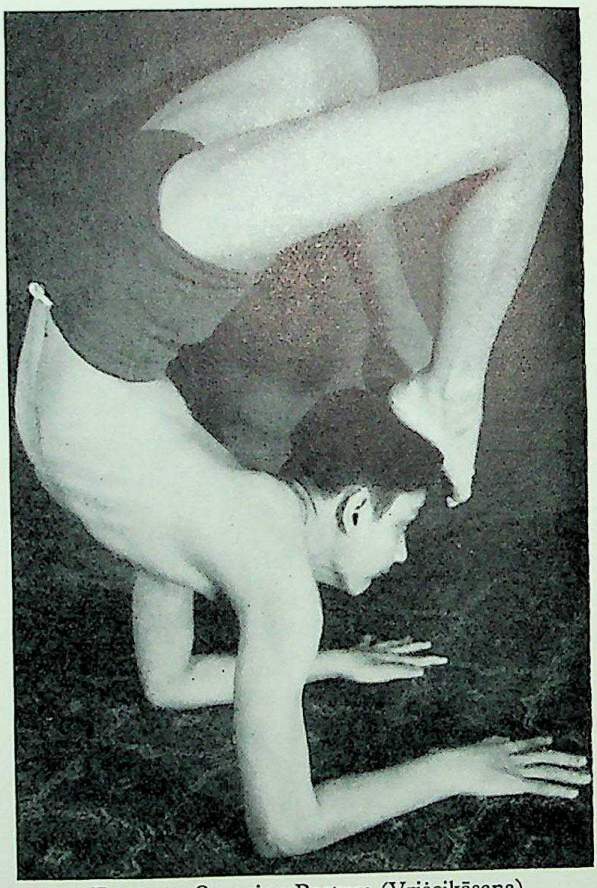


FIG. 100. Scorpion Posture (Vṛiścikāsana).

14. *Scorpion Posture*

Stage 1: Assume Head Posture (Fig. 103) and then slowly move the forearms away from the head and keep them by the sides of the head with the fingers directed forward.

Stage 2: Bend the legs downward, bending at the knees and arching the spine to the maximum extent. Now raise the head from the floor upward as much as possible by supporting the body on the forearms and place the soles on your elevated head. Maintain the final attitude for a few seconds (Fig. 100).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

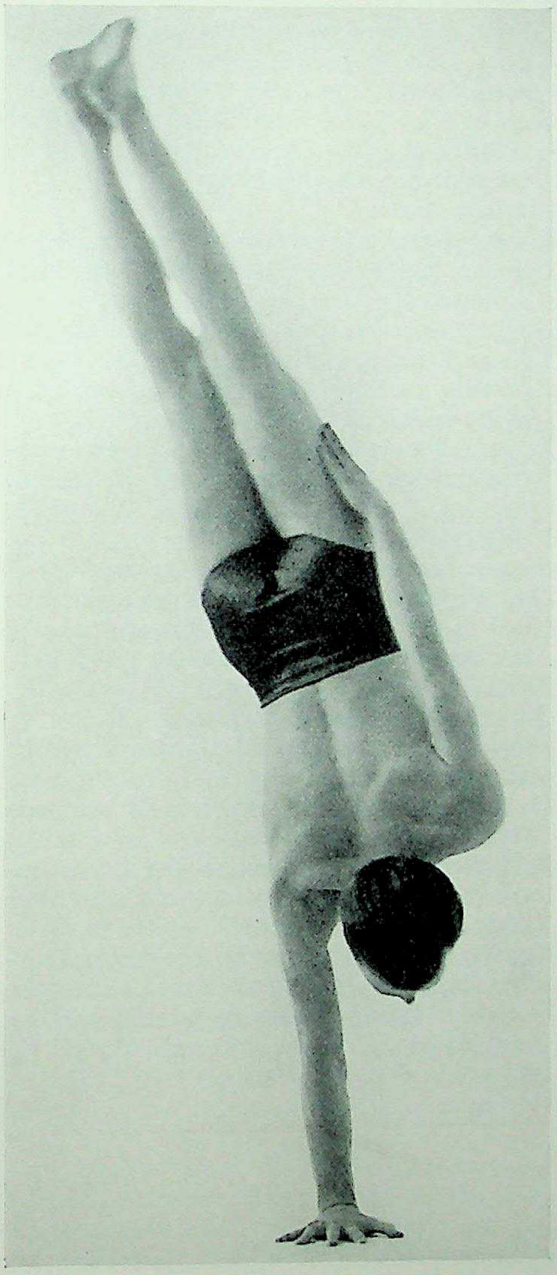


FIG. 100A. Single Arm-stand Posture (Ekahasta Vṛikṣāsana).

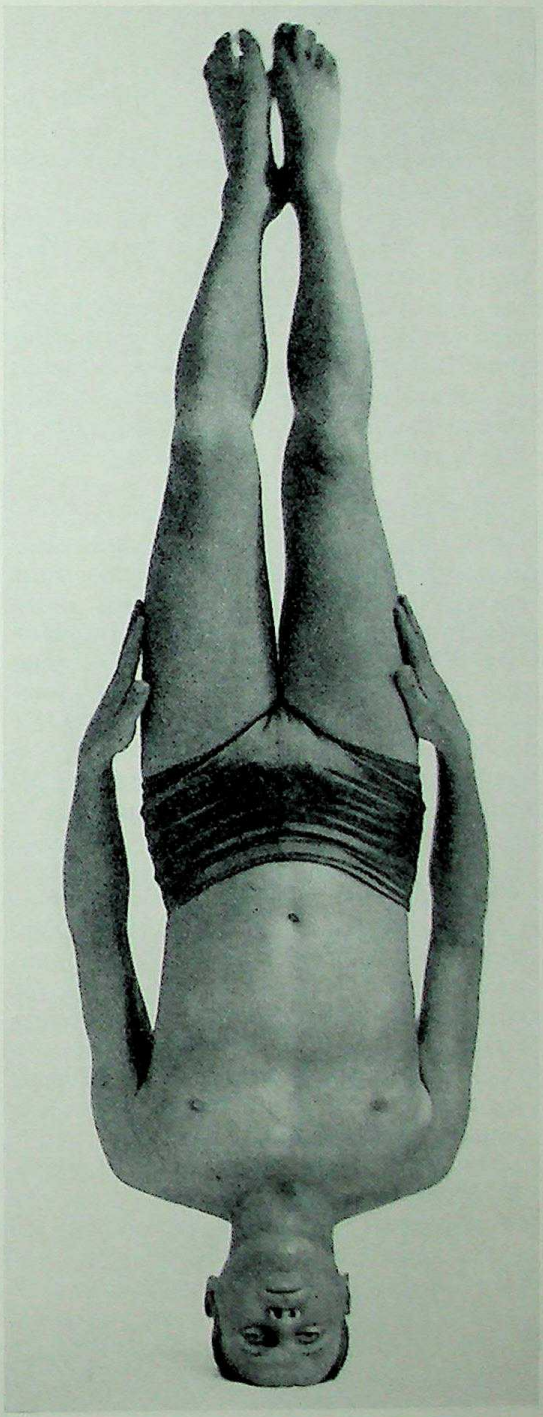


FIG. 100B. Head-stand Posture (Śirāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Stage 3: Return to stage 1.
Breathing: Normal.
Concentration: On the movement.
Dynamic Application: Stages 2 and 3 should be alternately executed.
Static Application: Maintain the final attitude (stage 2) as per instruction.
Relaxation: In a sitting position with the legs extended forward and the arms by the sides, after completion of the exercise.
Remark: It is also an excellent posterior trunk-bend posture exercise. It requires great spinal flexibility and well-controlled balance. Beginners are advised to practise first Modified Scorpion Posture in which the feet are brought nearer the elevated head.

Supplementary Balance Posture Exercise

Peacock Posture is not only an important balance exercise but it is utilized in Yoga for other purposes. The intra-abdominal pressure is increased in this exercise which helps the expulsion of fluid from the colon if there is any left after Colonic Auto-lavage, Alimentary Canal Auto-lavage and enema. It is a suitable position for attaining control over the anal sphincters. Also some exercises have been evolved from this posture which may be called Peacock Posture exercises.

1. *Peacock Posture Exercises*

(1) Assume Peacock Posture with the legs close together. Extend the legs outward to the maximum extent.
(2) Curl the legs on the thighs, keeping the thighs horizontal in Peacock Posture.
(3) Curl the legs on the thighs in Peacock Posture and then extend the knees outward as much as possible, keeping the thighs horizontal.
(4) Raise one leg as high as possible from the horizontal position in Peacock Posture.
(5) Raise both legs upward from the horizontal position in Peacock Posture.
(6) Practise Anal-Act in Peacock Posture.
(7) Practise Anal-lock Act in Peacock Posture.

2. *Single Arm-stand Posture*

Stage 1: Assume Arm-stand Posture (Fig. 99).
Stage 2: Lean slowly on the right side, transferring the body weight gradually to the right hand.
Stage 3: Raise the left hand off the floor and place the left arm by the side of the body, standing on the right arm only (Fig. 100A).
Breathing: Normal.
Concentration: On the movement.
Dynamic Application: Stages 1, 2 and 3 should be repeated.
Static Application: Maintain the final attitude (stage 3) as long as you can.
Relaxation: In Standing Posture, after completion of the exercise.
Remark: It is an advanced balance posture exercise. It should also be practised with the left arm.

3. *Head-stand Posture*

Stage 1: Assume Head Posture (Fig. 103).
Stage 2: Gradually raise the hands off the floor and place the arms by the sides of the body, standing on the head (Fig. 100B).
Breathing: Normal.
Concentration: On the movement.
Dynamic Application: Stages 1 and 2 should be alternately executed.
Static Application: Maintain the final attitude (stage 2) as long as you can.
Relaxation: In a sitting position with the legs extended forward and the arms by the sides, after completion of the exercise.
Remark: It is an advanced balance posture exercise. Students are advised to practise first the Modified Head-stand Posture in which only one arm is placed by the body instead of both.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XX

Inverse Body Posture Exercise

To counteract the evil effects of the biped position, to achieve a healthful circulatory, respiratory, alimentary, eliminative, glandular and nervous readjustment in the organism and to increase the power of concentration the inverse body posture exercise has been evolved in Yoga.

The most palpable effect of the inverse body posture is the acceleration of the venous circulation. The blood flow through all the veins which finally pour into the inferior vena cava is hastened. Therefore it is helpful in relieving congestion in the abdomino-pelvic viscera. It is a unique form of venous exercise which is also helpful for the heart and the arteries.

The changed position of the abdominal and pelvic organs and the altered pressure condition seem to have a healthful influence on these organs. It is an excellent diaphragmatic exercise. If the diaphragm is displaced downward due to habitual wrong posture, it will help to correct it if other right exercises are taken and the posture itself corrected. It improves the diaphragmatic pump and facilitates deep breathing.

It causes an increased blood supply to the brain. This seems to be very favourable for the efficient functioning of the brain. It has been experienced that the power of clear thinking and concentration are developed. It is also very helpful and healthful for those who sit upright in a motionless posture for concentration for a prolonged period.

The efficiency of inverse body posture exercise becomes pronounced when it is applied statically and the posture maintained for a longer period. From the reports of the writer's pupils practising Head Posture regularly and for a prolonged period certain interesting facts may be presented here:

1. It improves general health.
2. It cures certain types of headache.
3. It relieves pain in the back.
4. It removes the tired feeling.
5. It increases the power of resistance to cold.
6. It prevents loss of hair. It has also been reported, where the hair had begun to become grey, this tendency was controlled.
7. It gives a feeling of well-being.
8. It increases the digestive power.
9. It gives increased power of thinking and mental calmness.

The blood pressure experiments on Head Posture show that in the majority of cases the normal systolic pressure suddenly rises high when the posture is assumed and remains high during its maintenance. Then there is the second rise of the systolic pressure. At this point the posture is discontinued and the subject lies on his back. At this stage the pressure becomes normal or a little subnormal. The rise of the systolic pressure above the normal is from 15 to 45 mm. Hg. The highest rise noted was 175 mm. Hg. from the normal 130 mm. Hg.

There is a little increase of pulse-rate during Head Posture. It is about 3 to 10 per minute. The pulse-rate becomes a little subnormal immediately after the discontinuance of the posture and the assuming of a supine posture. It becomes normal when the upright position is resumed. In certain cases it does not increase at all during Head Posture but becomes subnormal. It again becomes normal after the resumption of the upright posture. There is also an increase in the rate of respiration during Head Posture, from 2 to 8 per minute. In certain cases it remains constant.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

There are also exceptional cases. In one subject with normal pressure of 120 mm. Hg. it was found that the rise was very little, about 4 or 5 mm. Hg. after the assumption of Head Posture, and it gradually went higher and reached 140 mm. Hg. after 55 minutes. Then the posture was discontinued and the blood pressure returned to the normal level. The subject was a male, healthy, 42 years of age and practising Head Posture for over a year under the guidance of the writer.

In another case it was found that there was a gradual fall of blood pressure from 145 to 120 and then 115 occurring at the 25th minute, and then it gradually rose a little above 125 occurring at the 40th minute. After the discontinuance (after 40 minutes) the blood pressure went down to 110 in a horizontal position and remained at 135 in an upright position. The subject was a female, 49 years of age, and was undergoing the practice of the posture under the guidance of the writer for more than a year. By the regular practice of this posture she became much healthier, stronger and fitter. Moreover, she is able to make herself more serene and to be contemplative while in this posture.

However, the static form of inverse body posture exercise is not a heavy form of exercise and may be applied with proper modifications to practically all conditions of health. Middle-aged persons can practise it with great advantage. It will improve their health. In cases with a tendency of high blood pressure it can be adopted. When the blood pressure is very high, of course, it is contraindicated. Persons who are mentally calm will have little rise in blood pressure in this type of exercise. Those who are not calm can be so in this posture exercise. This exercise has a decidedly sedative influence on the nervous system. It is very good for those who lead a sedentary life, devoting most of their time to brain work and for those who are leading a life of worry and hurry.

If the duration of time in this exercise is very gradually increased and internal cleanliness is maintained by right diet, internal baths and other measures, no harmful results will ever be experienced. On the contrary, it will prove invigorating and healthful physically, giving calmness, joy and meditative power mentally. The posture should be positively discontinued before the second rise of blood pressure. In other words, when a positive discomfort feeling arises, the posture should be discontinued. The duration of time should be very gradually increased.

We are presenting here four important inverse body posture exercises, and of the four, Head Posture is the most important.

1. *Inverse Act*

Stage 1: Assume supine-lying position with the legs extended, the feet close together, the arms by the sides, the palms downward.

Stage 2: Raise the legs and then the pelvis and the lower part of the trunk from the floor until the trunk assumes a slanting position with the legs in a perpendicular position by pressing the arms strongly against the floor. Now support this attitude of the trunk by placing the hands on the hip-bones, bending the forearms at the elbows. The body is now supported on the back of the head, neck, scapular region of the trunk and arms. The chin is kept away from the chest. Maintain the final attitude (Fig. 101).

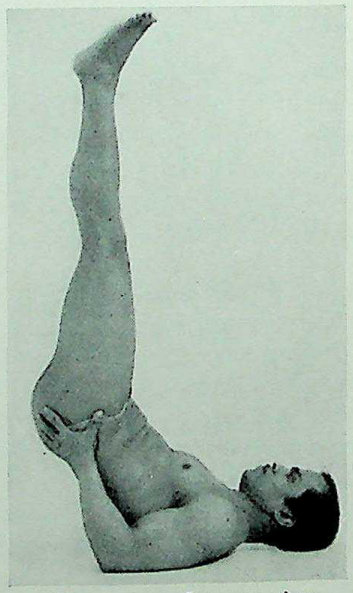


FIG. 101. Inverse Act (Viparīta-karaṇī-mudrā).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: As per instruction.

Dynamic Application: Not necessary.

Static Application: Maintain the final attitude (stage 2) as per instruction.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: The best time for this exercise is in the morning (after evacuation and oral cleansing). The next best time is in the evening, before dinner. This exercise should not be practised when the stomach is full.

2. *Shoulder Posture*

Stage 1: Assume supine-lying position with the legs extended, the feet close together, the arms extended by the sides, the palms downward.

Stage 2: Raise the legs, then the pelvis and finally the trunk upward until the trunk and the legs become perpendicular and in a straight line, by pressing the arms strongly against the floor. The body now stands on the shoulders. Now bring the chest close to the chin and support the body with the hands. Finally, perform Chin-lock Act. Pushing the trunk by the hands towards the head may be helpful in the execution of Chin-lock Act. Maintain the final attitude (Fig. 102).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: As per instruction.

Dynamic Application: Not necessary.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: See the remark in Inverse Act. It is supposed that Shoulder Posture improves the functional activities of the thyroid gland by causing an increased blood supply to this organ through the superior thyroid arteries.

3. *Head Posture*

Stage 1: Kneel on the floor with heels raised, bend the body forward, place the ulnar side of the forearms on the floor in front of you, interlock the fingers of both hands and place the head on the floor between the forearms in such a way that the back of the head will fit in between the hollows of the interlocked hands. Now, supporting the body on the forearms and head, raise the trunk and hips upward until they are almost perpendicular to the floor with the legs stretched and the toes still remaining on the floor.

Stage 2: Slowly raise the legs upwards from the

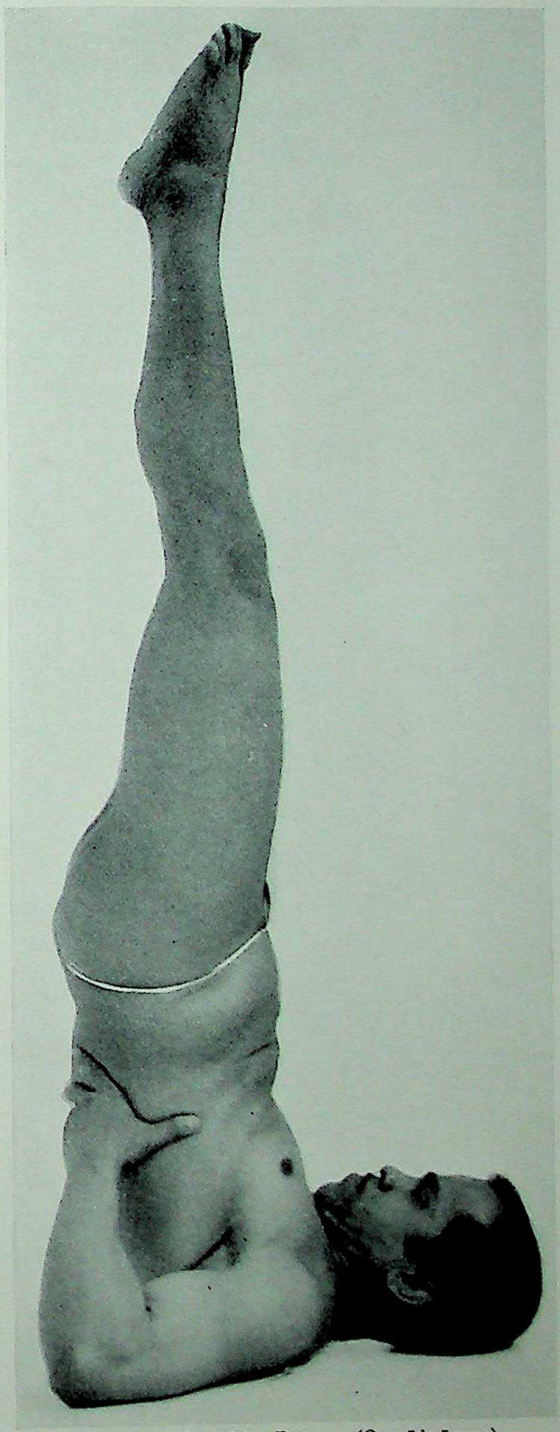


FIG. 102. Shoulder Posture (Sarvāṅgāsana).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

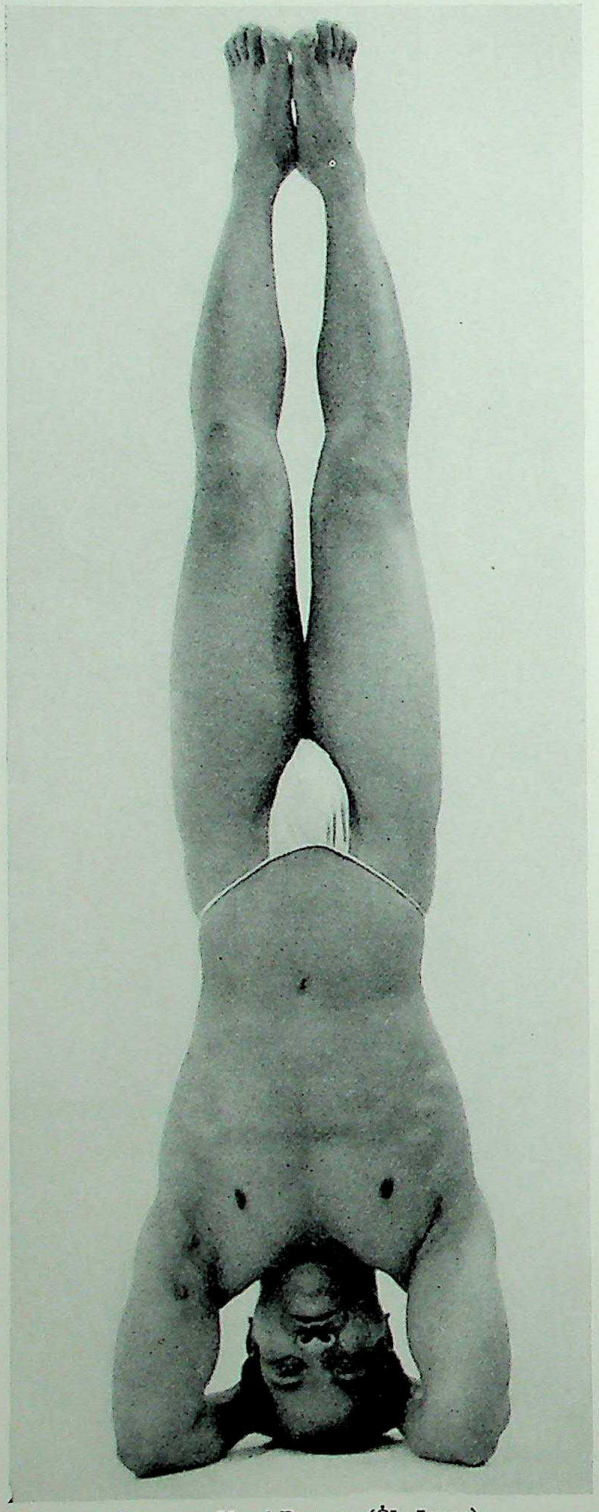


FIG. 103. Head Posture (Śīrṣāsana).

floor until they are perpendicular and in a straight line with the raised trunk and the head. If the beginner is not able to raise the legs slowly in this manner, he can first bend his thighs on the trunk with the knees drawn to his chest and from this position slowly extend the legs upwards. Maintain the final attitude (Fig. 103).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: As per instruction.

Dynamic Application: Not necessary.

Static Application: Maintain the final attitude (stage 2) as per instruction.

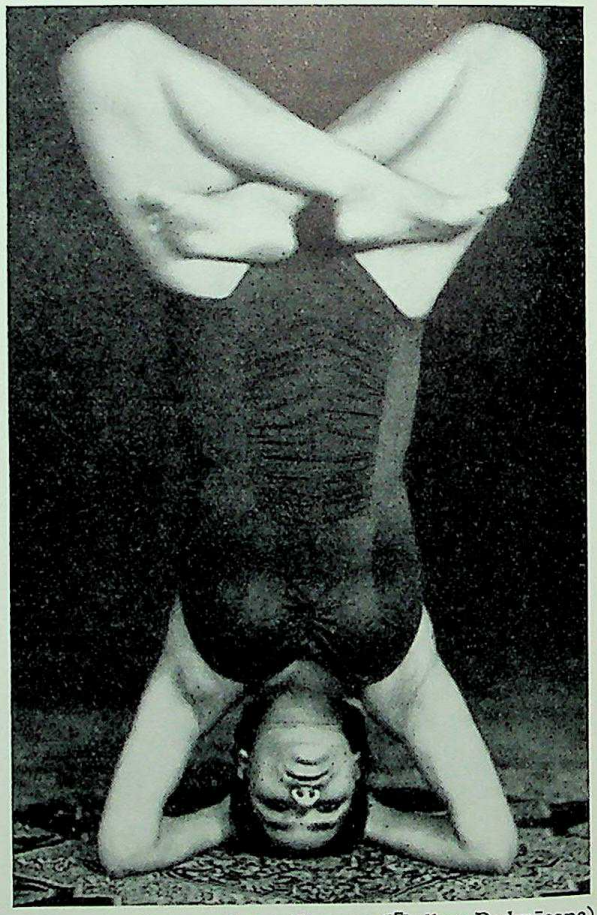


FIG. 104. Inverse Lotus Posture (Ūrdhva Padmāsana).

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: As in Inverse Act. It is desirable to place a soft cushion under the head when doing Head Posture.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

4. *Inverse Lotus Posture*

Stage 1: Assume Head Posture (Fig. 103).

Stage 2: Perform Lotus Posture (Fig. 106). Maintain the final attitude (Fig. 104).

Stage 3: Return to stage 1.

Breathing: Normal.

Concentration: As per instruction.

Dynamic Application: Not necessary.

Static Application: Maintain the final attitude (stage 2) as per instruction.

Relaxation: In Corpse Posture, after completion of the exercise.

Remark: As in Inverse Act.

Supplementary Inverse Body Posture Exercise

Certain leg and trunk motion exercises have been evolved in Head Posture. These may be called Head Posture exercises. The movements themselves are valuable, especially for the pelvic and perineal muscles. Another important point is that these exercises make the student maintain the posture for a longer period. Therefore, these exercises help to prolong the duration of time of this posture.

Head Posture Exercises

1. Lower both legs sideward and downward simultaneously until they are almost horizontal. Return to the original position. Exhale when lowering the legs, inhale when raising them. Repeat.
2. Lower one leg forward and downward until it is horizontal. Return to the original position. Exhale when lowering the leg, inhale when raising it. Repeat.
3. The same movement as No. 2 with both legs simultaneously.
4. Bend the legs at the knees inward with the soles together, bringing the heels as close to the perineum as possible, exhaling. Return, inhaling. Repeat.
5. Bring the heels as close to the perineum as possible as in No. 4. Now bring the knees close together in front, inhaling. Return to the starting position, exhaling.
6. Bend one leg forward and downward until the toes touch the floor. Return to the original position. Breathing normal. Repeat.
7. The same movement as No. 6 with both legs simultaneously.
8. Bend both legs sideward and a bit forward until the toes touch the floor. Return to the original position. Breathing normal. Repeat.
9. Bend one leg forward and downward and the other leg backward and downward as much as possible. Reverse. Repeat.
10. Bend one leg forward and downward and the other leg backward and downward as in No. 9. Now twist the pelvis to the right and left to the fullest extent. Breathing normal.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XXI

Folded-legged Postures

It is the experience of the students of Yoga that for deep concentration and breath-control folded-legged postures are the most suitable. These postures, when perfected and mastered, create a most favourable condition for breath-suspension and mental concentration.

Folded-legged posture is a sitting posture with the legs bent at the knees and placed in a definite manner, the body erect. There are many such postures. We are presenting here four important postures which will serve our purpose. The real effectiveness of these postures lies in their static application. These postures are also used in connection with Contraction Exercise, Abdomino-retraction Act, Straight-muscle Act and other processes and exercises of Yoga. By repeated practice in a right manner, these postures should be perfected and mastered. Then they will give a sense of ease and comfort instead of uneasiness and pain.

1. *Accomplished Posture*

Stage 1: Sit with the body erect, the legs extended in front and the arms by the sides.

Stage 2: Bend the left leg at the knee and fold it upon itself with the heel tightly set against the perineum and the sole in contact with the upper part of the right thigh. Then bend the right leg at the knee and fold it upon itself with the heel placed against the pubic bone just above the genitals, the foot within the depression formed by the left thigh and calf. Keep the trunk straight. Either the hands may be placed one upon the other at the centre of the body or the arms extended with the hands placed on the knees. Maintain the attitude as per instruction (Fig. 105).

Stage 3: After completion of the exercise, return to stage 1.

Breathing: Normal.

The following breath-exercises may be practised in this posture:

(1) Modified Lingual Breath-control Exercise.

(2) Modified Alternate Breath-control Exercise.

Fig. 105. Accomplished Posture (Siddhāsana).

(3) Modified Both-nostrils Breath-control Exercise with abdomen relaxed.

(4) Modified Both-nostrils Breath-control Exercise with abdomen retracted.

(5) Modified Both-nostrils Breath-control Exercise with Breath-suspension.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Concentration: The following processes may be adopted for concentration:

(1) Japa (counting in a definite manner) of Om or other Mantras.

(2) Concentration on specific objects.

(3) Japa combined with concentration.

(4) Breath-control with Japa and concentration.

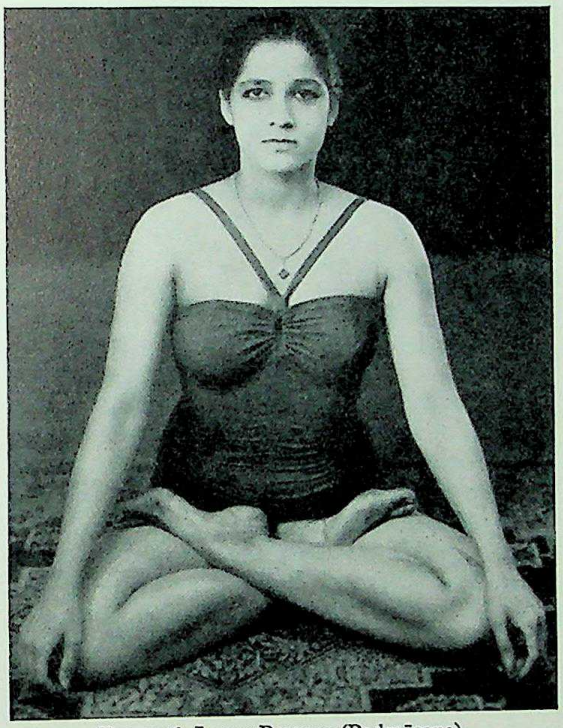


FIG. 106. Lotus Posture (Padmāsana).

2. *Lotus Posture*

Stage 1: Sit erect, the legs extended in front and the arms by the sides.

Stage 2: Place the right foot on the left groin by bending the right leg at the knee. Place the left foot on the right groin in a similar manner. The feet should be so placed that the heels should be at the centre of and in close contact with the abdomen. Either the hands may be placed one upon the other at the centre of the body or the arms extended with the hands placed on the knees. Maintain the attitude as per instruction (Fig. 106).

Stage 3: After completion of the exercise, return to stage 1.

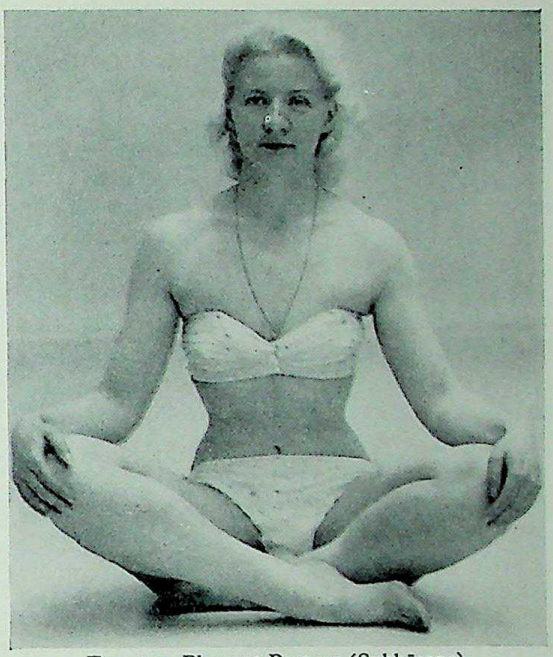


FIG. 107. Pleasant Posture (Sukhāsana).

Breathing: Normal. The following breath-exercises may be practised in Lotus Posture:

(1) Abdomino-short-quick Breath Act.

(2) Modified Lingual Breath-control Exercise.

(3) Modified Alternate Breath-control Exercise.

(4) Modified Both-nostrils Breath-control Exercise with abdomen relaxed.

(5) Modified Both-nostrils Breath-control Exercise with abdomen retracted.

(6) Modified Both-nostrils Breath-control Exercise with breath-suspension.

Concentration: As in Accomplished Posture.

3. *Pleasant Posture*

Stage 1: Sit erect with the legs extended in front and the arms by the sides.

Stage 2: Bend the left leg at the knee and place it close to the left thigh with the left heel close to the centre of the body or in contact with the upper part of the right thigh. Then place the right leg close to the outer side of the folded left leg, bending at the knee. Keep the body erect. Either the hands may be placed one upon the other at the centre of the body or the arms may be extended with the hands placed on the knees. Maintain the attitude as per instruction (Fig. 107).

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

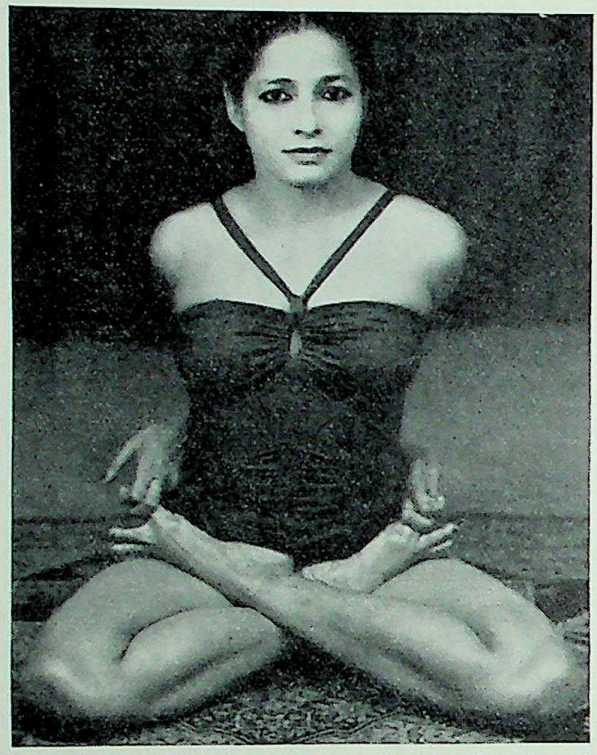


FIG. 108. Toe-hold Lotus Posture (Baddha Padmāsana).

Stage 3: After completion of the exercise, return to stage 1.

Breathing: Normal. The following breath-exercises may be practised while in this posture:

(1) Modified Lingual Breath-control Exercise.

(2) Modified Alternate Breath-control Exercise.

(3) Modified Both-nostrils Breath-control Exercise with abdomen relaxed.

(4) Modified Both-nostrils Breath-control Exercise with abdomen retracted.

(5) Modified Both-nostrils Breath-control Exercise with breath-suspension.

(6) Abdomino-short-quick Breath Act.

Concentration: As in Accomplished Posture.

Remark: There are different techniques for this posture. One of them is described above. Another technique is given below: Sit erect with the left leg bent at the knee and the left heel placed close to and under the upper part of the right thigh, and the outer side (fibular) of the right foot placed in the depression formed by the folding of the left leg on the left thigh. This form may suit many persons.

4. *Toe-hold Lotus Posture*

Stage 1: Assume Lotus Posture (Fig. 106).

Stage 2: Bring the right arm to the left side and the left one to the right side, making them cross each other behind the back. Now grasp the left big toe with the right hand and the right big toe with the left hand. Keep the trunk erect. Maintain the attitude as per instruction (Fig. 108).

Stage 3: Return to stage 1 after completion of the exercise and then to stage 4.

Stage 4: Sit with the legs extended in front and the arms by the sides.

Breathing: Normal.

Concentration: As per instruction.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XXII

Breath-control Exercise (Prāṇāyāma)

YOGA breath-control exercises are executed while the body is in a stationary attitude. There are also certain breath-control exercises which are done in conjunction with dynamic muscular exercise.

The morning and the evening are the best times for the practice of breath-control exercise. For special purpose, it may also be performed at mid-day and midnight. Ordinarily, once or twice will be sufficient. In the morning it should be practised after normal evacuation, oral cleansing and other appropriate internal cleansing acts. Oral cleansing and nasal cleansing are important before commencing breath-control exercise in the morning. In the evening, it should be done after normal evacuation and colonic bath, if possible. Take the colonic bath about twice a week in the evening before the practice, which should be done before dinner.

If breath-control exercise is undertaken mainly for physical education purposes, it should be done outdoors. If the weather does not permit this, a well-ventilated clean room should be selected for the purpose. For concentration a secluded but well-ventilated place, free from all disturbances, should be selected. A suitable cushion of proper size may be utilized when breath-control exercise is done in a sitting posture. In fact, almost all the breath-control exercises in Yoga are done in a sitting posture. The traditional seat used in breath-control exercise consists of a Kuśa grass carpet on which is spread a well-tanned deer hide covered with a piece of clean cloth.

There are a number of postures suitable for the practice of breath-control exercise. The following three can be selected: Accomplished Posture, Lotus Posture, and Pleasant Posture (see Chapter XXI).

The Lotus Posture is the most suitable one for breath-control exercise, especially the short-quick type. The Pleasant Posture is more suitable for beginners and those who have not mastered the Accomplished or the Lotus Posture. In certain breath-control exercises it is necessary to keep either of the nostrils closed with a view to doing inspiration or expiration with a particular nostril. During the period of breath-suspension, both nostrils are to be kept closed. For the purpose of closing the nostrils, the ring-finger, the little-finger and the thumb of the right hand are used, the index and the middle fingers folded on the palm. The right thumb is used for the right nostril and the right ring-finger and the little finger for the left nostril. Ugly facial contortions should be avoided during breath-control exercise.

Classification of Breath-control Exercise

Breath-control exercise may be classified into two main groups: long-slow type and short-quick type. Breath-suspension forms the most important part of the long-slow type. But it is omitted at the preparatory stages. After the respiratory organs are strengthened, and control over them is gained to a certain limit by the long-slow and short-quick respiratory exercises, breath-suspension is incorporated. The higher forms of breath-control exercise cannot be learnt without the help of a teacher. Here, we are presenting the less complicated exercises which are, of course, of immense value and very suitable both for the students of physical education and concentration.

Long-slow Breath-control Exercise

1. *Modified Both-nostrils Breath-control Exercise (Laghu Ujjāyī) with Abdomen Relaxed*

Assume any of the three folded-legged postures, with the arms extended and the hands placed on

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

the knees. Relax the body and make the mind calm. This may best be achieved by concentrating the mind on the normal breathing movements for a few minutes. All these apply to all breath-control exercises. Now inspire slowly through both nostrils, keeping the glottis partially closed which will produce a soft sobbing-like sound. At the end of inspiration, expire slowly through both nostrils without making any sound. The abdomen should be kept relaxed throughout the exercise. Concentration: on breathing. Repetition: 5 to 21 rounds. Commence with 5 rounds and increase by 2 rounds each week until 21 rounds are reached. After completion of the exercise relax completely and breathe normally. This also applies to all exercises.

2. *Modified Both-nostrils Breath-control Exercise (Laghu Ujjāyī) with Abdomen Retracted*

The technique is the same as the Modified Both-nostrils Breath-control Exercise with abdomen relaxed, with the following difference: The front abdominal wall should be kept slightly retracted throughout both inspiration and expiration. In expiration the abdominal wall will naturally be more retracted than in inspiration. Concentration: On breathing. Repetition: 5 to 21 rounds.

3. *Both-nostrils Breath-control Exercise with Breath-suspension (Ujjāyī)*

Inspire slowly through both nostrils with the soft sobbing-like sound, then hold the breath with chin-lock act, raise the head up and finally expire through both nostrils very slowly without making any sound but retracting the front abdominal wall slightly.

The relative measures of inspiration, suspension and expiration are the following:

1st stage: Long inspiration—easy suspension—long expiration.

2nd stage: Inspiration 10 counts—suspension 20 counts—long expiration.

3rd stage: Inspiration 20—suspension 40—long expiration.

4th stage: Inspiration 20—suspension 40—expiration 40. The counting should be done mentally and slowly, about 1 count per second.

Repetition: 3 to 11 rounds.

Remark: The number of rounds should be increased very slowly and sufficient length of time should be given in each stage.

4. *Modified Lingual Breath-control Exercise (Laghu Śītalī)*

Roll the tongue lengthwise into a trough and protrude the rolled tongue a little beyond the lips. Inspire slowly through the rolled tongue until the lungs are filled, make a swallowing movement and then expire slowly through both nostrils. No straining should be made in inspiration with the object of taking more air into the lungs. Concentration: on breathing. Repetition: 10 to 50 times. Commence with 10, and increase by 3 each week until you reach 50.

5. *Modified Alternate Breath-control Exercise (Laghu Nāḍīśuddhi)*

Inspire slowly through the left nostril until the lungs are filled, closing the right nostril with the right thumb. At the end of inspiration expire slowly through the right nostril, closing the left one with the right ring- and little-fingers. Then inspire through the right nostril and expire through the left one. This is one round. Concentration: on breathing. Repetition: 3 to 21 rounds. Commence with 3 rounds and increase by 1 round each week until 21 rounds are reached.

6. *Alternate Breath-control with Breath-suspension (Sahita)*

The best posture to assume in Sahita is the Lotus Posture. If the posture is not fully mastered, either of the other two may be adopted. First inspire slowly through the left nostril, closing the right nostril with the right thumb. At the end of inspiration suspend the breath, closing the nostrils with the right thumb and the little- and ring-fingers. During suspension make chin-lock act, abdomino-retraction act and anal-lock act. At the end of suspension, raise the head to its normal position, and relax the abdomen and the anal region, release the thumb and very slowly expire through the right nostril without making any sound, closing the left one with the right ring- and little-fingers. In this manner again inspire through the right nostril, suspend and expire through the left nostril. Repeat. After the exercise is over, relax and breathe normally.

Concentration: Either chosen object as instructed with or without mantra, or on the respiratory acts.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Round and measures: One round consists of one inspiration, one suspension and one expiration. The relative measures of inspiration, suspension and expiration for beginners are 1-2-2 and for advanced pupils 1-4-2. This means that the period of suspension is twice that of inspiration and the period of expiration is the same as that of suspension in the first case, and the period of suspension is four times that of inspiration and the period of expiration twice that of inspiration in the second case.

The following are the stages of measures:

	Inspiration	*Suspension*	*Expiration*
Stage 1 . .	8	16	16
Stage 2 . .	16	32	32
Stage 3 . .	20	40	40
Stage 4 . .	4	16	8
Stage 5 . .	8	32	16
Stage 6 . .	10	40	20
Stage 7 . .	12	48	24
Stage 8 . .	14	56	28
Stage 9 . .	16	64	32

A student who wants to go beyond this limit (16-64-32) requires personal instruction from a competent teacher. From 3 to 20 rounds at one sitting are sufficient for ordinary students. Commence with 3 rounds. Increase the rounds very slowly as well as the measures.

Time: The practice of this breath exercise twice a day, morning and evening, or even once, is sufficient for ordinary students, and students of physical education. Advanced students are advised to practise it four times, morning, mid-day, evening and midnight, or three times, omitting the midnight practice.

An Experiment on Sahita Breath-control

The author conducted an experiment to ascertain the effects of sahita breath-control when combined with a heavy form of developmental exercise. The subjects used to take a vigorous form of muscular exercise including weight-lifting thrice a week, in the evening, and the time devoted to it was from 2 to 3 hours. Sahita breath-control was practised thrice a day: morning, noon and evening. On the exercise days, the breath exercise was performed about two hours after the muscular exercise was over.

The diet consisted of raw and cooked vegetables, fruits, small quantities of cereals, and plenty of milk and butter; no meat, fish or eggs. Three meals were served. Only raw vegetables, fresh fruits and sour milk were taken once in a week. The body was kept internally clean by various cleansing processes. Sexual continence was strictly observed.

After continuing this programme for six months, it was found that the general health was excellent, the body full of energy and the mind cheerful. The development of the size and strength of the muscles was extraordinary. There were no evil after-effects.

This breath-control exercise is an excellent measure to maintain perfect health and to increase the power of concentration. It should be practised regularly. The right diet should be observed, carefully avoiding overeating. The body should be kept internally purified by purificatory acts.

Short-quick Breath-control Exercise

1. *Abdomino-short-quick Breath-act (Kapālabhāti)*

Lotus Posture is the best posture for this exercise. The other two postures may be assumed, if the lotus posture is not properly mastered. Whatever posture is assumed, the body should be kept erect and relaxed, and the hands on the knees. First, expire through both nostrils quickly with an inward abdominal push, i.e. a quick retraction of the front abdominal wall. This quick expiration should be immediately followed by quick inspiration through both nostrils with the relaxation of the front abdominal wall. Expiration and inspiration will go on in a continuous series without any break and any rest between, until a round is complete.

An attempt should be made to execute this breath exercise as quickly as possible without, of course, sacrificing thoroughness. This exercise always commences with expiration and ends with inspiration.

Concentration: On the respiratory act.

Speed Rate and Round: One expulsion a second, 60 a minute, is the mild type of speed. Two expulsions a second (120 a minute) is the medium type of speed. Above this rate is the fastest type which an advanced student is able to maintain.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

The beginner should try to attain 60 a minute rate. Then in time he will be able to do it at a rate of 120 a minute. Finally it will be possible for him to reach the stage of doing it at the rate of 240 expulsions per 1 minute.

The ordinary round consists of 120 expulsions. This should be attained in a graduated manner, commencing from 20 or 30 expulsions and adding 10 each week until 120 expulsions are reached. Three rounds are to be performed at each sitting. At the end of one round the whole body, especially the abdomen, should be relaxed and normal breathing assumed.

Remark: Abdomino-short-quick Breath-act can be performed either before or after muscular exercise or both before and after. It serves as an excellent warming-up process and drives the idle blood from the abdominal region into the general circulation when done before exercise. This breathing exercise is said to have a great oxygen value, and so it may help to lessen the extent of oxygen debt during muscular exercise within certain limits and hasten the recovery period when performed after exercise is over. This may also be practised in the morning or evening alone.

2. *Thoracico-short-quick Breath-act* (*Laghu Bhastrikā*)

The technique is exactly the same as that of Abdomino-short-quick Breath-act with the following exception: The breathing should be done through the chest while keeping the abdomen relaxed and unmoved. The real difference between this breathing exercise and Abdomino-short-quick Breath-act is that the former is the thoracic type of breath exercise while the latter is the abdominal type.

Concentration: On the chest and breathing.

Speed Rate and Round: As Abdomino-short-quick Breath-act.

Remark: As Abdomino-short-quick Breath-Act.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XXIII

Concentration Exercise

A SUITABLE place should be selected for the practice of concentration. A calm room is the best for beginners. There should be neither too much light nor any disturbing air currents. It should be clean and comfortable and free from any kind of disturbance.

A soft comfortable cushion should be used as seat. It should be covered with a clean washable piece of cloth. No one should be allowed to use it.

It is absolutely necessary to adopt a folded-legged posture for the practice of concentration. Real concentration cannot be developed without it. The three folded-legged postures—Accomplished Posture, Lotus Posture and Pleasant Posture—are the best. Of the three, Pleasant Posture is the easiest and most suitable for beginners. The posture should first be fully mastered, otherwise it will not be possible to utilize it for the practice of concentration. In other words, there will not be any uneasiness, discomfort or pain while assuming the posture, rather it will give you a calm and pleasurable feeling. The body should be straight and fully relaxed during concentration.

The best time for the practice of concentration is the morning and evening. An advanced student may also add midnight for the purpose.

Physical Preparation for Concentration Exercise

The body should be made clean, internally as well as externally, and vital by internal and external baths, right diet, periodic fasting, muscular and breathing exercises and other measures prescribed in Yoga. If the body is not vigorous and healthy, you cannot make much progress in concentration. The undisturbed condition of the mind demands a body which is energetic, purified and free from disease.

Overeating is very much disturbing and a great hindrance to concentration. Eating wrong foods also is a hindrance. Food should be balanced, nutritious and laxative. Milk, fruits and vegetables should form an important part of the diet. Abstemious eating is the best.

When the colon is loaded with fecal material and becomes the breeding-place of poison-forming bacteria, the progress in concentration is very much obstructed. Mental restlessness is closely related to colonic unhealthfulness. Colonic healthfulness should be maintained by right diet, colonic baths and other measures.

The maintaining of vigorous blood movement through every part of the body is very helpful for developing the power of concentration. Therefore some suitable general muscular exercise is an important factor in developing the power of concentration. On the other hand, the exercise should not be too much fatiguing. If there is an accumulation of much fatigue poisons in the body due to heavy exercise, the mind becomes incapable of concentrating. In Yoga, however, measured physical education has been prescribed for the development of concentration.

A Method of Developing Concentration Power

There are various methods in Yoga for developing the power of concentration. We are presenting here a simple but efficacious method which a student can practise without much difficulty. The method consists of seven stages. It should be practised stage by stage.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

FIRST STAGE

1st Day: After normal evacuation and oral cleansing, perform the Gastric Auto-lavage. It should be followed by the colonic bath. Then take some form of steam bath or electric-light cabinet bath, to produce copious perspiration. During this bath drink a few glasses of warm water. After this take a cleansing bath. Then rest and take a glass of cool water. Another colonic bath may be taken in the evening. Fast.

2nd Day: Take colonic bath in the morning. It is then to be followed by the Gastric Auto-lavage. After an hour begin drinking warm water at intervals of 45 minutes, 5 or 6 times, one glass each time. Thereafter take a general bath. Then rest. Now and then you can drink a cup of cool water. In the evening take a glass of orange juice.

3rd Day: Take a colonic bath in the morning. Take the following three meals a day:

1st Meal: Fresh fruits.

2nd Meal: Milk or buttermilk, fresh acid fruits.

3rd Meal: Same as 2nd meal.

4th to 9th Days

1st Meal: Milk, fresh acid fruits.

2nd Meal: Buttermilk, acid and sweet fruits.

3rd Meal: Milk, acid and sweet fruits. Take a colonic bath in the evening.

10th Day and Thereafter: Normal diet. Take three meals.

Take liberal quantity of milk, proper quantity of butter and plenty of fruits and vegetables. Add laxative food. Drink water freely.

Take colonic bath once or twice a week, in the evening (before dinner). Do Gastric Auto-lavage about once a week, in the morning. The Pharyngo-nasal Water Baths may be daily taken in the morning.

The general exercise should include neck-exercise, spinal exercise and abdominal exercise in addition to the exercise for the rest of the body. An hour's walking at least four times a week is recommended.

Once a month take a complete or partial fast, fruit diet, fruit and milk diet or milk diet. Take sun and air baths. This programme of cleansing, dieting and exercising should be continued in all the succeeding stages.

SECOND STAGE

First Part

Breathing: (*a*) Abdomino-short-quick Breath-act or Thoracico-short-quick Breath-act; (*b*) Modified Both-nostrils Breath-control Exercise.

Second Part

Gazing: The technique of gazing is as follows: Sit in Accomplished Posture. Keep the body erect, either the hands on the knees or the palms on the heel in front of the abdomen. Relax fully. Now select a suitable object and gaze on it, the eyes wide open and without the least twinkle, until tears begin to flow. The object should be so placed that it is on a level with the space between the eyebrows of the student. The distance between the object and the student is usually measured by extending the arm forward with the fingers stretched and touching the object. A suitable stand will be made on which to place the object at the desired height. No part of the body should tremble during the gazing. Not only the eyes but also the mind should be fixed on the object. At the end of gazing, close the eyes, cover them with your cup-shaped hands and feel darkness for some time. Also take eye-bath daily at some convenient time, preferably before the practice.

At the beginning do not gaze so long that tears begin to flow. One or two minutes will be sufficient for the beginner. Then gradually increase the duration until you reach the time-limit at which tears come. The selection of an object is also an important thing. The type of the object varies with the efficiency of the student.

At the commencing stage use a light yellow coloured card with a black or blue circle about one cm. in diameter at the centre. Fix this centre at a proper height and gaze on it.

Third Part

Concentration: Sit in Accomplished Posture. If unable to do so, assume Pleasant Posture. Place your palms in front of your abdomen on the heel. Keep the body erect. Relax every part of your body. Your mind should be joyous and peaceful. Sit for a few minutes calmly. This attitude should be assumed in every stage.

Make a clear mental picture of the full moon. Now close your eyes and mentally place the picture of the full moon in the space between the

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

eyebrows. Concentrate on the moon. Continue concentration for 5 minutes. Gradually increase the time up to 30 minutes or more.

Fourth Part

Japa: Japa is the saying of Mantra. It may be done either mentally, uttered in a very low voice or said verbally. Here the method of uttering the Mantra in a very low voice so as not to be heard by others should be adopted. If you have not been initiated and given a particular Mantra, you can use A-U-M. In Japa it should be pronounced as O*N* (more or less like ong). The right pronunciation should be learnt from a teacher. For counting the number, it is convenient to use a garland of beads, made of some suitable material. It should have 100 beads and a separate string attached to the main string and containing 8 beads.

After the concentration is over, or when you find concentration too difficult, do not force your mind to concentrate but commence Japa. You can count 108, 208, 508, 1,008, and so on. The minimum is 108, and you can go to 1,008 and even 5,008 if you have time. Use the garland for counting the Mantra. The Japa should be done neither too quickly, nor too slowly, but at a moderate speed. In making Japa you need not think of the meaning of the Mantra, nor concentrate on any form. Simply think that A-U-M is the divine power in the form of sound and concentrate on the sound. The Japa will gradually increase the power of concentration. You can assume a regular posture for Japa, or any other position convenient to you.

THIRD STAGE

(1) *Breathing:* (*a*) Abdomino-short-quick Breath-act or Thoracico-short-quick Breath-act; (*b*) Modified Alternate Breath-control Exercise.

(2) *Gazing:* Object of gazing—a small ball of the size of an ordinary playing marble of transparent glass, to be placed on a stand at the level of the space between the eyebrows. Gazing should be continued until tears flow.

(3) *Concentration:* Object—the moon between the eyebrows. Longer time should be devoted to concentration.

(4) *Japa:* As in the 2nd stage.

FOURTH STAGE

(1) *Breathing:* As in the 3rd stage.

(2) *Gazing:* As in the 3rd stage.

(3) *Void-thinking:* Remain in the same posture as was assumed for gazing. Immediately after the gazing is over, close your eyes and then put cotton plugs into your ears, relax fully every part of the body and try to make your mind void, as completely as possible. Relax your mind, banish all thoughts and try to be conscious of nothing. The consciousness of ego, of any action, of any thought, of every thing should be dissolved. Try to forget yourself completely. Make yourself dead. Remain in this mental stage as long as you can.

(4) *Concentration:* Object—the moon between the eyebrows.

(5) *Japa:* As in the 2nd stage.

FIFTH STAGE

(1) *Breathing:* As in the 2nd stage.

(2) *Gazing:* As in the 3rd stage.

(3) *Void-thinking:* As in the 4th stage.

(4) *Alternate Breath-control with Breath-suspension* (*Sahita*), with concentration.

The process has been fully described in Chapter XXII. To the Breathing process has been added Mantra and concentration, which should be done in the following manner: During inspiration mentally count the Mantra "Ang" 4, 8, or 16 times, and along with the counting concentrate on the Consciousness of creation in the shape of a red-coloured human figure at the navel region (inside). During suspension mentally count the Mantra "Ung" 16, 32 or 64 times and at the same time concentrate on the Consciousness of protection in the shape of a blue (sky) coloured human figure at the region of the heart (inside). During expiration mentally count the Mantra "Mang" 8, 16 or 32 times and concentrate on the Consciousness of dissolution in the shape of a white-coloured human figure at the space between the eyebrows (inside).

Form a clear mental picture of the Mantras and the forms. By constant practice you will be able to do it. In counting use the fingers of the left hand.

(5) *Japa:* As in the 2nd stage.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

SIXTH STAGE

(1) Breathing: As in the 2nd stage.
(2) Gazing: Object of gazing—a candle-light.
The candle should be so placed that the flame will be at the level of the space between the eyebrows. The flame should be still. It should not be allowed to move at all. The gazing should be continued until tears flow.
(3) *Void-thinking:* (*a*) Void-thinking with closed eyes as in the 4th stage. (*b*) Void-thinking with open eyes.
After finishing with closed eyes, open the eyes and try not to see anything. It is an extremely difficult form of void-thinking, but by constant practice you will be able to do it. When doing this with the eyes open, keep the ears closed with cotton plugs. When you master it with the eyes open, try to do it with the cotton removed.
(4) Alternate breath-control with breath-suspension (Sahita), with concentration.
(5) *Japa:* As in the 2nd stage.

SEVENTH STAGE

(1) *Breathing:* As in the 2nd stage.
(2) *Gazing:* Object—a candle-light.
(3) *Void-thinking:* With and without closed eyes.
(4) *Concentration:* Sit in Accomplished Posture (Siddhāsana), with the trunk erect, the whole body relaxed, palms on the heel at the centre of the abdomen.
Think that Kuṇḍalinī, the Grand Spiritual Potential, is in a sleeping state, remaining coiled round the Svayambhū, the static support, in the subtle Mūlādhāra Centre situated within the lowest portion of the filum terminale in the upper part of the coccyx. It is the centre of the yellow-coloured quadrangular Earth-principle. Think of Kuṇḍalinī as a subtle white luminous body remaining in a sleeping state. Now bring your "I-principle" to Kuṇḍalinī. Then mentally say "Yang", the sound-symbol of the Air-principle, and at the same time think that Kuṇḍalinī is agitated by the force of air. Then mentally say "Rang", the sound-symbol of the Fire-principle, and at the same time think that Kuṇḍalinī is being heated by the force of fire. Then mentally say "Hung", the sound-symbol of strength and think that Kuṇḍalinī is being aroused by the strength of the Mantra. Now think that "Lang", the sound-symbol of the Earth-principle, has been dissolved in Kuṇḍalinī.
Now say "Hangsaḥ" and think that Kuṇḍalinī is rising upward by the force of the Mantra from the Mūlādhāra Centre and enters the second centre named Svādhiṣṭhāna, situated within the spine at the level of the root of the genitals. It is the centre of the white-coloured semilunar Water-principle, represented by the sound-symbol "Wang". Think that "Wang" sinks into Kuṇḍalinī. From here Kuṇḍalinī ascends and enters the third spinal centre named Maṇipūra, situated at the level of the navel region. It is the centre of the red-coloured triangular Fire-principle represented by the sound-symbol "Rang". Think that "Rang" is absorbed into Kuṇḍalinī. Then think that Kuṇḍalinī rises up and enters into the fourth spinal centre, named Anāhata, situated at the level of the heart. It is the centre of the smoke-coloured, six-cornered Air-principle represented by the sound "Yang". Think that "Yang" is absorbed in Kuṇḍalinī. Think that Kuṇḍalinī ascends and enters the fifth spinal centre named Viśuddha situated at the base of the throat. It is the centre of the white-coloured circular Ether-principle, represented by "Hang". Think that "Hang" is absorbed into Kuṇḍalinī. Think that Kuṇḍalinī rises up into the sixth white-coloured centre named Ājñā, situated within the brain (under the cerebrum) at a level of the space between the eyebrows. Think that the senses, mind and the I-feeling are absorbed in Kuṇḍalinī. Think that Kuṇḍalinī rises up and enters the moon-white thousand-petalled centre in the cerebrum. Here resides the Grand Static Consciousness, named Parama Śiva—the birthless, deathless, changeless and eternal. Think that Kuṇḍalinī becomes united with and dissolved into the Static Grand Consciousness. Try to be in that mental state as long as you can.
Now do the Sahita breath-control, adding the following method of concentration: During inspiration through the left nostril, mentally count the Mantra "Yang" 16 times and at the same time think that "Yang" is the manifested power of the Air-principle, smoke-coloured and having the power of drying impurities within the body. The inspiration through the left nostril is immediately followed by suspension. During

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

suspension mentally count "Yang" 64 times, and at the same time deeply think that the inefficient and impure part of the body is being dried up by the power of the Mantra. The suspension is followed by expiration through the right nostril. During expiration mentally count "Yang" 32 times and think that the wastes of your body have been dried up. Then inspire through the right nostril, and at the same time mentally count the red-coloured "Rang", the symbol of the Fire-principle, 16 times and deeply think that the Mantra has the burning power. Now suspend for 64 counts of "Rang" and at the same time think that the dried wastes of the body are being burnt by the fire generated from "Rang". Then exhale through the left nostril, counting "Rang" 32 times, and at the same time think that the burning of the wastes has been complete. Again inspire through the left nostril, counting the moon-coloured Mantra "Ṭhang" 16 times, and at the same time think that nectar is flowing from the thousand-petalled lotus to all parts of the body. Suspend, counting the white-coloured "Wang" 64 times, and at the same time think that a new vital body has been constructed. Then exhale through the right nostril, counting the yellow-coloured "Lang" 32 times, and at the same time think that the newly reconstructed body has become firm by the power of "Lang". Now think that your body has become vital, healthy, vigorous, strong, refined and divine. If you like, you can do a few more rounds of Sahita breath-control without Mantras.

Now think that the Grand Static Consciousness lying in the thousand-petalled Centre and Kuṇḍalinī become one and manifest as the Great Creative Consciousness, the Lord of known and unknown. Now give Him a human form, that which is most appealing to you and which excites in you a divine feeling, a sacredness, bliss and peace of your mind. Bring Him to the region of your heart, worship Him mentally and do Japa mentally of the specific Mūla-Mantra if initiated, otherwise O*N* (Ong), for 1,008 or 508 times. The minimum is 108 times. You can do more if you feel like it. During the time of Japa think that He is the manifested Consciousness, having two forms of manifestation—the Mantra and the form (human shape), and that they are inseparably related to each other. It may be noted here that there are particular forms associated with particular Mūla-Mantras, which are given to the students by the Guru (teacher) during initiation.

Now fully concentrate your mind on Him without Japa, and try to be in that state as long as you can. You should try to increase the time of concentration. After finishing the concentration bring Him to the thousand-petalled Centre. Think that Kuṇḍalinī has been separated from the Grand Static Consciousness. Bring Kuṇḍalinī (by thinking) to the Ājñā Centre and think that the I-feeling, mind and senses, being purified, come out from Kuṇḍalinī, and are placed in the centre. Then bring Kuṇḍalinī to the Viśuddha Centre and replace the purified Ether-principle (emerging from Kuṇḍalinī) there. Next bring Kuṇḍalinī to the Anāhata Centre and replace the purified Air-principle there. Then bring Kuṇḍalinī to the Maṇipūra Centre and replace there the purified Fire-principle. Now bring Kuṇḍalinī to the Svādhiṣṭhāna Centre and replace the purified Water-principle there. Finally bring Kuṇḍalinī to the Mūlādhāra Centre and replace the purified Earth-principle there. Now think that Kuṇḍalinī again goes to her sleeping state. Bring back your "I-principle" from Kuṇḍalinī.

The process[1] ends here.

(5) *Japa:* If you have the inclination and time you can do Japa as in the 2nd stage.

[1] This process of concentration is essentially based on Laya-yoga.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Part III

EXERCISE PLAN

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XXIV

General Exercise Plan

THE efficacy of exercise depends much on the right combination and order. According to the type of exercise incorporated in a plan, it may be light, medium or heavy form of exercise. Again, it may be made lighter or heavier by either adopting low, medium or high repetition methods. In each plan there should be a definite order of exercise.

To simplify matters, three forms of exercise have been presented, and for each form two plans. According to age, sex, condition of health, individual capacity, previous training and requirements a suitable plan from a suitable form of exercise should be selected. Generally speaking, it is always desirable to commence with a lighter plan of exercise and work gradually with the heavier plan.

Light Form of Exercise

PLAN 1

Order	*Fig.*	*Name of exercise*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen relaxed (5 to 20 times)
2	—	Neck Flexion-extension
3	—	Neck Rotation
4	85	Toe Posture
5	79	Thigh Posture
6	1	Serpent Posture
7	—	Modified Locust Posture
8	15	Back-stretch Posture
9	34	Spine Posture
10	49	Head-knee Spine Posture
11	59	Pelvis-raise Posture
12	87	Eagle Posture
13	—	Modified Lingual Breath-control Exercise (10 to 30 times)

Relaxation in Corpse Posture.

Remark: This form of exercise may be made lighter or heavier by working with low, medium or high repetition method. This applies to all plans.

PLAN 2

Order	*Fig.*	*Name of exercise*
1	—	Modified Both-nostrils breath-control Exercise with abdomen relaxed (20 times)
2	55	Abdomino-retraction Act
3	—	Neck Flexion-extension
4	—	Neck Rotation
5	85	Toe Posture
6	79	Thigh Posture
7	1	Serpent Posture
8	2	Snake Posture
9	4	Locust Posture
10	5	Bow Posture
11	15	Back-stretch Posture
12	25	Twist Posture
13	22	Semilunar Posture
14	35	Spine Posture with hands clasped behind head
15	38	Oblique Spine Posture
16	42	Plough Posture
17	9	Cuckoo Posture
18	70	Risen Lotus Posture
19	78	Arm Motion
20	73	Quadruped Posture
21	61	Single Foot-head Posture
22	95	Peacock Posture
23	—	Modified Lingual Breath-control Exercise (30 times)

Relaxation in Corpse Posture.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Medium Form of Exercise

PLAN 1

Order	*Fig.*	*Name of exercise*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted (20 times)
2	55	Abdomino-retraction Act
3	—	Neck Flexion-extension
4	—	Neck Rotation
5	85	Toe Posture
6	79	Thigh Posture
7	81	Feet-extending Thigh Posture
8	2	Snake Posture
9	7	Swing Posture
10	15	Back-stretch Posture
11	23	Hip-bend Posture
12	26	Modified Spine-twist Posture
13	50	Knee-touching Spine Posture
14	39	Oblique Spine Posture with hands clasped behind head
15	42A	Plough Posture with forearms locked behind head
16	71	Cock Posture
17	63	Single Foot-head Head-knee Posture
18	89	Wing Posture
19	—	Modified Lingual Breath-control Exercise (30 times)

Relaxation in Corpse Posture.

PLAN 2

Order	*Fig.*	*Name of exercise*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed (20 times)
2	55	Abdomino-retraction Act
3	56	Straight-muscle Act
4	—	Neck Flexion-extension
5	32	Neck Posture
6	85	Toe Posture
7	83	Leg-raise Thigh Posture
8	11	Bent-head Adamantine Posture
9	15	Back-stretch Posture
10	17	Forward Head-bend Posture
11	3	Back-raise Posture with forearms locked behind head
12	27	Ankle-hold Modified Spine-twist Posture
13	36	Spine Posture with forearms locked behind head
14	40	Oblique Spine Posture with forearms locked behind head
15	46	Risen Leg Posture
16	73	Quadruped Posture
17	75	Arm-leg Posture
18	65	Pillar Posture
19	63	Single Foot-head Head-knee Posture
20	94	Mountain Posture
21	93	Standing Leg-stretch Posture
22	—	Abdomino-short-quick Breath Act
23	—	Modified Lingual Breath-control Exercise (30 times)

Relaxation in Corpse Posture.

Heavy Form of Exercise

PLAN 1

Order	*Fig.*	*Name of exercise*
1	—	Modified Both-nostrils Breath-control Exercise
2	55	Abdomino-retraction Act
3	56	Straight-muscle Act
4	—	Neck Flexion-extension
5	33	Neck-bridge Posture
6	86	One-legged Toe Posture
7	83	Leg-raise Thigh Posture
8	3	Back-raise Posture with forearms locked behind head
9	13	Back Posture
10	21	Foot-hand Posture
11	18	Head-bend Posture
12	30	Sideward Head-bend Posture
13	44	Risen Back Posture
14	51	Pillow Posture
15	75	Arm-leg Posture
16	76	Opposite Arm-leg Posture
17	62	Double Foot-head Posture
18	100	Scorpion Posture
19	—	Abdomino-short-quick Breath Act
20	—	Modified Lingual Breath-control Exercise (30 times)

Relaxation in Corpse Posture.

PLAN 2

Order	*Fig.*	*Name of exercise*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed (20 times)
2	55	Abdomino-retraction Act

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Order	*Fig.*	*Name of exercise*
3	56	Straight-muscle Act
4	—	Neck Flexion-extension
5	33	Neck-bridge Posture
6	86	One-legged Toe Posture
7	84	One-legged Squat Posture
8	8	Serpent-king Posture
9	14	Wheel Posture
10	21	Foot-hand Posture
11	24	Moon Posture
12	29	Spine-twist Posture
13	37	Risen Balance Posture
14	52	Toe-hold Lateral Spine Posture
15	40	Oblique Spine Posture with forearms locked behind head
16	70	Risen Lotus Posture
17	76	Opposite Arm-leg Posture
18	77	Arm Posture
19	66	Noose Posture
20	98	One-arm Rolling Posture
21	100	Scorpion Posture
22	—	Abdomino-short-quick Breath Act
23	—	Modified Lingual Breath-control Exercise (30 times)

Relaxation in Corpse Posture.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XXV

Specific Exercise Plan and Daily Schedule

SPECIFIC exercise is mainly intended for developing a particular part of the body to a high standard and for specific results. For the best results specific exercise should be combined with general exercise. Specific exercise may either be incorporated into the general exercise plan or taken separately according to individual requirements.

Specific exercise is classified into specific spinal posture exercise, neck posture exercise, abdominal posture exercise, pelvic posture exercise, pectoral limb posture exercise and pelvic limb posture exercise. When specific exercise is combined with general exercise and practised at the same time, those exercises which may be found in the specific group may be omitted from the general group. But if specific exercises are practised separately and at some other time, it is not necessary to eliminate them from the general exercise plans. Selection of specific exercise should be made according to individual requirements.

Dynamic Spinal Posture Exercise Plans

PLAN 1

Order	*Fig.*	*Name of exercise*	*Repetition*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed .	10-20 times
2	1	Serpent Posture . .	10-20 ,,
3	4	Locust Posture . .	8-16 ,,
4	5	Bow Posture . .	10-20 ,,
5	21	Foot-hand Posture .	10-20 ,,
6	15	Back-stretch Posture .	10-20 ,,
7	22	Semilunar Posture .	10-20 ,,
8	25	Twist Posture . .	10-20 ,,
9	26	Modified Spine-twist Posture . . .	6-12 ,,
10	—	Modified Lingual Breath-control exercise .	15-30 times

Relaxation in Corpse Posture.

PLAN 2

Order	*Fig.*	*Name of exercise*	*Repetition*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed .	10-20 times
2	1	Serpent Posture . .	5-10 ,,
3	2	Snake Posture . .	5-10 ,,
4	4	Locust Posture . .	3-5 ,,
5	11	Bent-head Adamantine Posture . .	3-5 ,,
6	17	Forward Head-bend Posture . . .	3-5 ,,
7	12	Modified Wheel Posture	3-5 ,,
8	13	Back Posture . .	3-5 ,,
9	14	Wheel Posture . .	3-5 ,,
10	21	Foot-hand Posture .	5-10 ,,
11	18	Head-bend Posture .	3-5 ,,
12	20	Forward Body-bend Posture . . .	3-5 ,,
13	22	Semilunar Posture .	3-5 ,,
14	23	Hip-bend Posture .	3-5 ,,
15	24	Moon Posture . .	3-5 ,,
16	30	Sideward Head-bend Posture . . .	3-5 ,,
17	27	Ankle-hold Modified Spine-twist Posture .	3-5 ,,
18	29	Spine-twist Posture .	3-5 ,,
19	—	Modified Lingual Breath-control Exercise .	15-30 ,,

Relaxation in Corpse Posture.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Dynamic Neck Posture Exercise Plans

PLAN 1

Order	*Fig.*	*Name of exercise*	*Repetition*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed .	10-20 times
2	—	Neck Flexion-extension.	10-20 ,,
3	—	Neck Rotation . .	10-20 ,,
4	—	Lateral Neck Flexion .	10-20 ,,
5	—	Modified Lingual Breath-control Exercise .	15-30 ,,

Relaxation in Corpse Posture.

PLAN 2

Order	*Fig.*	*Name of exercise*	*Repetition*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed .	10-20 times
2	—	Neck Flexion-extension.	25-50 ,,
3	—	Neck Rotation . .	25-50 ,,
4	—	Lateral Neck Flexion .	25-50 ,,
5	32	Neck Posture . .	10-20 ,,
6	33	Neck-bridge Posture .	10-20 ,,
7	—	Modified Lingual Breath-control Exercise .	15-30 ,,

Relaxation in Corpse Posture.

Dynamic Abdominal Posture Exercise Plans

PLAN 1

Order	*Fig.*	*Name of exercise*	*Repetition*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed .	10-20 times
2	34	Spine Posture . .	10-20 ,,
3	35	Spine Posture with hands clasped behind head	10-20 ,,
4	38	Oblique Spine Posture .	10-20 ,,
5	42	Plough Posture . .	10-20 ,,
6	47	Sideward Leg-motion Posture . . .	10-20 ,,
7	49	Head-knee Spine Posture	10-20 ,,
8	50	Knee-touching Spine Posture . . .	10-20 ,,
9	5	Bow Posture . .	10-20 ,,
10	6	Boat Posture . .	10-20 ,,
11	—	Modified Lingual Breath-control Exercise .	15-30 ,,

Relaxation in Corpse Posture.

PLAN 2

Order	*Fig.*	*Name of exercise*	*Repetition*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed .	15-30 times
2	55	Abdomino-retraction Act	50-100 ,,
3	56	Straight-muscle Act .	50-100 ,,
4	35	Spine Posture with hands clasped behind head	3-6 ,,
5	36	Spine Posture with forearms locked behind head . . .	3-6 ,,
6	37	Risen Balance Posture .	3-6 ,,
7	39	Oblique Spine Posture with hands clasped behind head . .	3-6 ,,
8	40	Oblique Spine Posture with forearms locked behind head . .	3-6 ,,
9	42	Plough Posture . .	3-6 ,,
10	42A	Plough Posture with forearms locked behind head . . .	3-6 ,,
11	44	Risen Back Posture .	3-6 ,,
12	46	Risen Leg Posture .	3-6 ,,
13	45	Bent-knee Back Posture.	3-6 ,,
14	50	Knee-touching Spine Posture . . .	3-6 ,,
15	51	Pillow Posture . .	3-6 ,,
16	41	Lateral Spine Posture .	3-6 ,,
17	52	Toe-hold Lateral Spine Posture . . .	3-6 ,,
18	5	Bow Posture . .	5-10 ,,
19	14	Wheel Posture . .	3-6 ,,
20	—	Modified Lingual Breath-control Exercise .	15-30 ,,

Relaxation in Corpse Posture.

Dynamic Pelvic Posture Exercise Plans

PLAN 1

Order	*Fig.*	*Name of exercise*	*Repetition*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed .	10-20 times
2	59	Pelvis-raise Posture .	15-30 ,,
3	60	Arm-head Posture .	10-20 ,,
4	61	Single Foot-head Posture	10-20 ,,

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Order	Fig.	Name of exercise	Repetition
5	64	One-leg Pillar Posture	10-20 times
6	65	Pillar Posture	10-20 ,,
7	—	Modified Lingual Breath-control Exercise	15-30 ,,

Relaxation in Corpse Posture.

PLAN 2

Order	Fig.	Name of exercise	Repetition
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	10-20 times
2	59	Pelvis-raise Posture	10-20 ,,
3	61	Single Foot-head Posture	3-6 ,,
4	63	Single Foot-head Head-knee Posture	3-6 ,,
5	62	Double Foot-head Posture	3-6 ,,
6	64	One-leg Pillar Posture	3-6 ,,
7	65	Pillar Posture	3-6 ,,
8	66	Noose Posture	3-6 ,,
9	—	Anal Act	250-500 ,,
10	—	Modified Lingual Breath-control Exercise	15-30 ,,

Relaxation in Corpse Posture.

Dynamic Pectoral Limb Posture Exercise Plans

PLAN 1

Order	Fig.	Name of exercise	Repetition
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	10-20 times
2	70	Risen Lotus Posture	10-20 ,,
3	71	Cock Posture	10-20 ,,
4	78	Arm Motion	15-30 ,,
5	73	Quadruped Posture	15-30 ,,
6	74	Three-footed Posture	10-20 ,,
7	—	Modified Lingual Breath-control Exercise	15-30 ,,

Relaxation in Corpse Posture.

PLAN 2

Order	Fig.	Name of exercise	Repetition
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	10-20 times
2	70	Risen Lotus Posture	10-20 ,,
3	71	Cock Posture	10-20 ,,
4	72	One-arm Cock Posture	5-10 times
5	78	Arm Motion	10-20 ,,
6	73	Quadruped Posture	30-50 ,,
7	74	Three-footed Posture	15-30 ,,
8	75	Arm-leg Posture	15-30 ,,
9	76	Opposite Arm-leg Posture	15-30 ,,
10	77	Arm Posture	10-20 ,,
11	—	Modified Lingual Breath-control Exercise	15-30 ,,

Relaxation in Corpse Posture.

Dynamic Pelvic Limb Posture Exercise Plans

PLAN 1

Order	Fig.	Name of exercise	Repetition
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	10-20 times
2	79	Thigh Posture	30-50 ,,
3	80	Knee-touching Thigh Posture	10-20 ,,
4	81	Feet-extending Thigh Posture	10-20 ,,
5	82	Sideward Feet-extending Thigh Posture	10-20 ,,
6	85	Toe Posture	20-40 ,,
7	—	Modified Lingual Breath-control Exercise	15-30 ,,

Relaxation in Corpse Posture.

PLAN 2

Order	Fig.	Name of exercise	Repetition
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	10-20 times
2	79	Thigh Posture	25-50 ,,
3	81	Feet-extending Thigh Posture	15-30 ,,
4	82	Sideward Feet-extending Thigh Posture	15-30 ,,
5	83	Leg-raise Thigh Posture	10-20 ,,
6	84	One-legged Squat Posture	10-20 ,,
7	85	Toe Posture	20-40 ,,
8	86	One-legged Toe Posture	10-20 ,,
9	—	Modified Lingual Breath-control Exercise	15-30 ,,

Relaxation in Corpse Posture.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Daily Schedule

According to general physical condition, previous training, the extent of muscular development, individual requirements, age and sex, a suitable schedule may be selected and followed.

SCHEDULE 1

Morning	*Evening*
Monday—	
Breath-control Exercise	General Posture Exercise (Light Form)
Tuesday—Do. . .	Do.
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. . .	General Posture Exercise (Light Form)
Friday—Do. . .	Do.
Saturday—Do. . .	Long Walking
Sunday—Do. . .	Rest

SCHEDULE 2

Morning	*Evening*
Monday—	
Breath-control Exercise	General Posture Exercise (Medium Form)
Tuesday—Do. . .	Do.
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. . .	General Posture Exercise (Medium Form)
Friday—Do. . .	Do.
Saturday—Do. . .	Long Walking or Swimming
Sunday—Do. . .	Rest

SCHEDULE 3

Morning	*Evening*
Monday—	
Breath-control Exercise	General Posture Exercise (Heavy Form)
Tuesday—Do. . .	Do.
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. . .	General Posture Exercise (Heavy Form)
Friday—Do. . .	Do.
Saturday Do. . .	Long Walking or Swimming
Sunday—Do. . .	Rest

SCHEDULE 4

Morning	*Evening*
Monday—	
Breath-control Exercise	General Posture Exercise (Light, Medium or Heavy Form according to necessity, etc.)
Abdomino - retraction Act	
Straight-muscle Act .	
Tuesday—Do. . .	Do.
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. . .	As Monday
Friday—Do. . .	Do.
Saturday—Do. . .	Long Walking or Swimming
Sunday—	
Breath-control Exercise	Rest

SCHEDULE 5

Morning	*Evening*
Monday—	
Breath-control Exercise	General Posture Exercise (Heavy Form)
Abdomino - retraction Act	
Straight-muscle Act .	
Tuesday—Do. . .	General Posture Exercise (Medium Form)
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. . .	General Posture Exercise (Light Form)
Friday—Do. . .	As Monday
Saturday—Do. . .	Long Walking, Running or Swimming
Sunday—	
Breath-control Exercise	Rest

SCHEDULE 6

Morning	*Evening*
Monday—	
Breath-control Exercise	General Posture Exercise and Specific Posture Exercise
Abdomino - retraction Act	
Straight-muscle Act .	
Tuesday—Do. . .	General Posture Exercise

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Morning	*Evening*
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. . .	As Tuesday
Friday—Do. . .	As Monday
Saturday—Do. . .	Long Walking, Running or Swimming
Sunday— Breath-control Exercise	Rest

SCHEDULE 7

Morning	*Evening*
Monday— Specific Posture Exercise	General Posture Exercise
Tuesday—Do. . .	Do.
Wednesday— Breath-control Exercise	Walking or other Constitutional Exercise
Thursday— As Monday . .	As Monday
Friday—Do. . .	Do.
Saturday— As Wednesday . .	Long Walking, Running or Swimming
Sunday—Do. . .	Rest

SCHEDULE 8

Morning	*Evening*
Monday— Specific Posture Exercise	General Posture Exercise
Tuesday— Breath-control Exercise	Do.
Wednesday— As Monday . .	Walking or other Constitutional Exercise
Thursday— As Tuesday . .	As Monday
Friday— As Monday . .	Do.
Saturday— As Tuesday . .	Long Walking, Running or Swimming
Sunday—Do. . .	Rest

SCHEDULE 9

	Evening
Monday . . .	General Posture Exercise
Tuesday . . .	Do.
Wednesday . .	Do.
Thursday . .	Do.
Friday . . .	Do.
Saturday . . .	Long Walking
Sunday . . .	Complete Rest

Remark: Constitutional exercise may be taken 3 or 4 times a week in the morning or any other suitable time.

SCHEDULE 10

	Evening
Monday . . .	General Posture Exercise
Tuesday . . .	Constitutional Exercise
Wednesday . .	General Posture Exercise
Thursday . .	Constitutional Exercise
Friday . . .	General Posture Exercise
Saturday . . .	Long Walking
Sunday . . .	Complete Rest

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Chapter XXVI

Static Exercise Plan and Daily Schedule

THE static exercise plan may be divided into light, medium and heavy forms. Here two plans are given for each form. Students are advised to practise static exercise in a graduated manner, from the light to the heavy forms. In selecting a plan, belonging to a form of exercise, age, sex, general condition of health, individual capacity, previous training and individual requirements should be carefully considered. It is always desirable to begin with a lighter plan and gradually working with the heavier one.

In the plans the maximum maintaining-time is given in exact minutes, for the convenience of the student. If anyone intends to go still higher, he may do so if he is well prepared. In this connection consult Chapter VII.

Another important point in connection with static exercise is that certain dynamic exercises should first be performed before commencing static exercises. This is always advantageous. We are presenting a group of dynamic exercises which should be done before static exercises are commenced. This group has been termed Fundamental dynamic exercises. They are included in each plan. In the plans the order and names of these exercises are omitted, and only "Fundamental dynamic exercises" are entered to avoid repetition. The following is the order and names of the exercises:

Order	*Fig.*	*Name*
1	55	Abdomino-retraction Act
2	56	Straight-muscle Act
3	—	Neck Flexion-extension
4	85	Toe Posture
5	79	Thigh Posture
6	50	Knee-touching Spine Posture
7	6	Boat Posture

The repetition method may be adopted according to the individual condition and requirements.

Light Form of Exercise

PLAN 1

Order	*Fig.*	*Name of exercise*	*Maintaining-time*
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	Rep. 10-20 times
2	—	Fundamental Dynamic Exercises	—
3	—	Modified Lingual Breath-control Exercise	„ 15-30 „
4	—	Relaxation in Corpse Posture	10 mins.
5	1	Serpent Posture .	Up to 2 mins.
6	2	Snake Posture . .	„ 2 „
7	15	Back-stretch Posture .	„ 3 „
8	21	Foot-hand Posture .	„ 1 min.
9	26	Modified Spine-twist Posture	„ 2 mins.
10	34	Spine Posture . .	„ 1 min.
11	42	Plough Posture. .	„ 3 mins.
12	59	Pelvis-raise Posture .	„ 2 „
13	87	Eagle Posture . .	„ 1 min.
14	101	Inverse Act . .	„ 6 mins.
15	—	Abdomino-short-quick Breath-act	—
16	—	Relaxation in Corpse Posture	10 mins.
17	107	Concentration in Pleasant Posture	—

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

PLAN 2

Order	Fig.	Name of exercise	Maintaining-time
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	Rep. 10-20 times
2	—	Fundamental Dynamic Exercises	—
3	—	Modified Lingual Breath-control Exercise	„ 15-30 „
4	—	Relaxation in Corpse Posture	10 mins.
5	1	Serpent Posture .	Up to 2 mins.
6	9	Cuckoo Posture .	„ 2 „
7	5	Bow Posture . .	„ 2 „
8	19	Head-bend Lotus Posture	„ 1 min.
9	15	Back-stretch Posture .	„ 3 mins.
10	27	Ankle-hold Modified Spine-twist Posture	„ 3 „
11	42	Plough Posture. .	„ 4 „
12	54	Bent-knee Inverse Lotus Posture	„ 1 min.
13	63	Single Foot-head Head-knee Posture	„ 1 „
14	71	Cock Posture . .	„ 2 mins.
15	80	Knee-touching Thigh Posture	„ 1 min.
16	90	Bent-head Wing Posture	„ 1 „
17	91	Knee-heel Posture .	„ 1 „
18	104	Inverse Lotus Posture	„ 6 mins.
19	—	Abdomino-short-quick Breath-act	—
20	—	Relaxation in Corpse Posture	10 mins.
21	105	Concentration in Accomplished Posture	—

Medium Form of Exercise

PLAN 1

Order	Fig.	Name of exercise	Maintaining-time
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	Rep. 10-20 times
2	—	Fundamental Dynamic Exercises	—
3	—	Modified Lingual Breath-control Exercise	Rep. 15-30 times
4	—	Relaxation in Corpse Posture	10 mins.
5	1	Serpent Posture .	Up to 3 mins.
6	3	Back-raise Posture with forearms locked behind head	„ 2 „
7	15	Back-stretch Posture .	„ 5 „
8	17	Forward Head-bend Posture	„ 2 „
9	23	Hip-bend Posture .	„ 2 „
10	31	Fish Posture . .	„ 2 „
11	33	Neck-bridge Posture	„ 2 „
12	36	Spine Posture with forearms locked behind head	„ 2 „
13	42A	Plough Posture with forearms locked behind head	„ 3 „
14	83	Leg-raise Thigh Posture	„ 2 „
15	92	Standing Single Foot-head Posture	„ 1 min.
16	94	Mountain Posture .	„ 2 mins.
17	67	Happy Posture. .	„ 2 „
18	101	Inverse Act . .	„ 15 „
19	—	Abdomino-short-quick Breath-act	—
20	—	Relaxation in Corpse Posture	10 mins.
21	106	Concentration in Lotus Posture	—

PLAN 2.

Order	Fig.	Name of exercise	Maintaining-time
1	—	As Plan 1. . .	—
2	—	Do. . . .	—
3	—	Do. . . .	—
4	—	Do. . . .	—
5	1	Serpent Posture .	Up to 4 mins.
6	4	Locust Posture. .	„ 1 min.
7	5	Bow Posture . .	„ 3 mins.
8	15	Back-stretch Posture .	„ 6 „

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Order	Fig.	Name of exercise	Maintaining-time
9	17	Forward Head-bend Posture	Up to 3 mins.
10	27	Ankle-hold Modified Spine-twist Posture	„ 4 „
11	42A	Plough Posture with forearms locked behind head	„ 4 „
12	71	Cock Posture . .	„ 3 „
13	97	Rolling Posture .	„ 2 „
14	100	Scorpion Posture .	„ 1 min.
15	67	Happy Posture. .	„ 4 mins.
16	—	Anal-lock Act . .	„ 1 min. each, 12 times
17	101	Inverse Act . .	Up to 15 mins.
		or	
	103	Head Posture . .	„ 20 „
18	—	Modified Alternate Breath-control Exercise	—
19	—	Abdomino-short-quick Breath Act	—
20	—	Relaxation in Corpse Posture	10 mins.
21	106	Concentration in Lotus Posture	—
		or	
	105	Accomplished Posture	—

Heavy Form of Exercise

PLAN 1

Order	Fig.	Name of exercise	Maintaining-time
1	—	Modified Both-nostrils Breath-control Exercise with abdomen retracted or relaxed	Rep. 10-20 times
2	—	Fundamental Dynamic Exercises	—
3	—	Modified Lingual Breath-control Exercise	Rep. 15-30 times
4	—	Relaxation in Corpse Posture	10 mins.
5	1	Serpent Posture .	Up to 6 mins.
6	8	Serpent-king Posture.	„ 3 „
7	15	Back-stretch Posture .	„ 6 „
8	18	Head-bend Posture .	„ 3 „
9	24	Moon Posture . .	Up to 3 mins.
10	29	Spine-twist Posture .	„ 2 „
11	44	Risen Back Posture .	„ 2 „
12	51	Pillow Posture . .	„ 2 „
13	62	Double Foot-head Posture	„ 2 „
14	—	Anal-lock Act . .	„ 1 min. each, 12 times
15	98	One-arm Rolling Posture	Up to 2 mins.
16	101	Inverse Act . .	„ 30 „
17	—	Abdomino-short-quick Breath-act	—
18	—	Modified Both-nostrils Breath-control Exercise with Breath-suspension	—
19	—	Relaxation in Corpse Posture	10 mins.
20	108	Concentration in Toe-hold Lotus Posture	—

PLAN 2

Order	Fig.	Name of exercise	Maintaining-time
1	—	As Plan 1. . .	—
2	—	Do. . . .	—
3	—	Do. . . .	—
4	—	Do. . . .	—
5	—	Chin-lock Act . .	Up to 2 mins.
6	31	Fish Posture . .	„ 6 „
7	1	Serpent Posture .	„ 6 „
8	8	Serpent-king Posture.	„ 3 „
9	15	Back-stretch Posture .	„ 6 „
10	20	Forward Body-bend Posture	„ 3 „
11	24	Moon Posture . .	„ 3 „
12	29	Spine-twist Posture .	„ 3 „
13	36	Spine Posture with forearms locked behind head	„ 2 „
14	42A	Plough Posture with forearms locked behind head	„ 6 „
15	51	Pillow Posture . .	„ 3 „
16	62	Double Foot-head Posture	„ 3 „
17	67	Happy Posture. .	„ 6 „

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Order	Fig.	Name of exercise	Maintaining-time
18	—	Anal-lock Act . .	Up to 1 min. each, 12 times
19	71	Cock Posture . .	Up to 3 mins.
20	97	Rolling Posture .	„ 3 „
21	103	Head Posture . .	„ 30 „
22	—	Abdomino-short-quick Breath-act	—
23	—	Modified Both-nostrils Breath-control Exercise with Breath-suspension	—
24	—	Relaxation in Corpse Posture	10 mins.
25		Concentration in—	
	105	Accomplished Posture	—
		or	
	106	Lotus Posture . .	—
		or	
	108	Toe-hold Lotus Posture	—

Daily Schedule

According to general physical condition, previous training, extent of muscular development, individual requirements, age and sex, a suitable schedule may be selected and followed. If dynamic exercises are regularly practised, some of the exercises from the fundamental dynamic group may be omitted, if desired.

SCHEDULE 1

Morning	*Evening*
Monday—Static Exercise	Dynamic Exercise (general)
Tuesday—Do. .	Do.
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. .	Dynamic Exercise (general)
Friday—Do. . .	Do.
Saturday—Do. .	Long Walking, Swimming, etc.
Sunday—Breath-control Exercise	Rest

SCHEDULE 2

Morning	*Evening*
Monday—Static Exercise	Dynamic Exercise (general and specific)
Tuesday—Do. .	Dynamic Exercise (general)
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. .	Dynamic Exercise (general and specific)
Friday—Do. . .	Dynamic Exercise (general)
Saturday—Do. .	Long Walking, Swimming, etc.
Sunday—Breath-control Exercise	Rest

SCHEDULE 3

Morning	*Evening*
Monday—Static Exercise .	Dynamic Exercise (general)
Tuesday—Do. .	Do.
Wednesday—Breath-control Exercise	Walking or other Constitutional Exercise
Thursday—Static Exercise	Dynamic Exercise (general)
Friday—Do. . .	Do.
Saturday—Do. .	Long Walking, Swimming, etc.
Sunday—Breath-control Exercise	Rest

SCHEDULE 4

Morning	*Evening*
Monday—Static Exercise	Dynamic Exercise (general and specific)
Tuesday—Do. .	Dynamic Exercise (general)
Wednesday—Breath-control Exercise	Walking or other Constitutional Exercise
Thursday—Static Exercise	Dynamic Exercise (general and specific)
Friday—Do. . .	Dynamic Exercise (general)
Saturday—Do. .	Long Walking, Swimming, etc.
Sunday—Breath-control Exercise	Rest

SCHEDULE 5

Morning	*Evening*
Monday—Static Exercise	Dynamic Exercise (general)
Tuesday—Do. .	Dynamic Exercise (specific)
Wednesday—Do. .	Walking or other Constitutional Exercise

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Morning	*Evening*
Thursday—Do. .	Dynamic Exercise (general)
Friday—Do. . .	Dynamic Exercise (specific)
Saturday—Breath-control Exercise	Long Walking, Swimming, etc.
Sunday—Do. .	Rest

SCHEDULE 6

Morning	*Evening*
Monday—Static Exercise	Walking
Tuesday—Breath-control Exercise	Dynamic Exercise
Wednesday—Static Exercise	Walking or other Constitutional Exercise
Thursday—Breath-control Exercise	Dynamic Exercise
Friday—Static Exercise	Walking
Saturday—Breath-control Exercise	Long Walking, Swimming, etc.
Sunday—Do. .	Rest

SCHEDULE 7

Morning	*Evening*
Monday—Breath-control Exercise	Static Exercise
Tuesday—Do. .	Dynamic Exercise
Wednesday—Do. .	Static Exercise
Thursday—Do. .	Dynamic Exercise
Friday—Do. . .	Static Exercise
Saturday—Do. .	Long Walking, Swimming, etc.
Sunday—Do. .	Rest

SCHEDULE 8

Morning	*Evening*
Monday—Breath-control Exercise	Static Exercise
Tuesday—Do. .	Dynamic Exercise
Wednesday—Do. .	Walking or other Constitutional Exercise
Thursday—Do. .	Static Exercise
Friday—Do. . .	Dynamic Exercise
Saturday—Do. .	Static Exercise
Sunday—Do. .	Long Walking, Swimming, etc.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Yoga Demonstrations

GIVEN by the author and his pupil, Dinabandhu Pramanick, at medical, educational, physical culture and other institutions in India, Japan, U.S.A., and Europe.

In India:
- Assembly Chambers, Shillong
- Bowring Hospital, Bangalore
- British Legation, Nepal
- British Medical Association (Hyderabad Branch)
- British Medical Association (South Indian Branch)
- Government House, Shillong
- His Highness the Maharaja of Benares' palace, Benares
- His Highness the Maharaja of Jammu and Kashmir, Srinagar
- His Highness the Maharaja of Mysore's palace, Bangalore
- His Highness the Maharaja of Patiala's palace
- Hyderabad Medical Association
- King George Hospital, Vizagapatam
- Madras Medical Association
- Nizam Club, Hyderabad (Deccan)
- Singha Durbar (His Highness' palace), Nepal

In Japan:
- Physiological Department, Imperial University, Tokyo
- St. Luke's International Medical Centre, Tokyo

In U.S.A.:
- American Physiotherapy Association, New York
- Chicago Osteopathic Association
- 43rd Congress of the American Naturopathic Association
- Macfadden's Physical Culture Institute, New York
- New York Athletic Club
- 1939 New York World's Fair
- Physicians' Square Club of Greater New York
- St. Luke's Hospital, Chicago

In Europe:
- Comité France-Inde, Paris, 1950
- L'Hôpital de la Salpétrière, Paris, 1950
- India House, London, 1950
- International Club, Stockholm, 1949
- Karolinska Sjukhuset, Stockholm, 1949
- Musée Guimet, Paris, 1950
- Physical Therapy Department, Zürich University, 1950
- Société de Kinesitherapie, Paris, 1951
- Société de Morpho-Physiologie Humaine, Paris, 1950
- Sorbonne (University of Paris), Paris, 1950
- UNESCO (United Nation's Educational, Scientific and Cultural Organization), Paris, 1951
- Uppsala University, Uppsala, 1949
- World Physical Education Congress, in connection with the Lingiad in Stockholm, 1949

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Note on the Pronunciation of Transliterated Sanskrit Words

THE following are the approximate English equivalents together with the symbols adopted by the International Phonetic Association:

a	has the sound of		a	in all (ɔ:)	ḍ	has the sound of		d	in do (d)
ā	,,	,,	a	,, father (a:)	ḍh	,,	,,	dh	,, red-haired (dh)
i	,,	,,	i	,, it (i)	ṇ	,,	,,	n	,, not (n)
ī	,,	,,	ee	,, see (i:)	t	,,	,,	almost of t (t)	
u	,,	,,	u	,, full (u)	th	,,	,,	th	in three (þ)
ū	,,	,,	oo	,, moon (u:)	d	,,	,,	th	,, there (ð)
ṛi	,,	,,	ri	,, river (ri)	dh	,,	,,	dh	,, adhere (dh)
e	,,	,,	ey	,, prey (ei)	n	,,	,,	n	,, no (n)
ai	,,	,,	oy	,, boy (ɔi)	p	,,	,,	p	,, pan (p)
o	,,	,,	o	,, molest (o)	ph	,,	,,	ph	,, philosophy (f)
au	,,	,,	o	,, go (ou)	b	,,	,,	b	,, bar (b)
k	,,	,,	k	,, kind (k)	bh	,,	,,	v	,, vanish (v)
kh	,,	,,	kh	,, inkhorn (kh)	m	,,	,,	m	,, mother (m)
g	,,	,,	g	,, go (g)	y	,,	,,	y	,, yet (j)
gh	,,	,,	gh	,, log hut (gh)	r	,,	,,	r	,, ram (r)
ṅ	,,	,,	ng	,, king (ŋ)	l	,,	,,	l	,, lady (l)
c	,,	,,	ch	,, chapter (tʃ)	v	,,	,,	w	,, walk (w)
ch	,,	,,	ch	,, chop-house(tʃh)	ś	,,	,,	sh	,, shade (ʃ)
j	,,	,,	j	,, job (dʒ)	ṣ	,,	,,	sh	,, ,, (ʃ)
jh	,,	,,	dgeh	,, hedgehog (dʒh)	s	,,	,,	s	,, saint (s)
ñ	,,	,,	ny	,, canyon (nj)	h	,,	,,	h	,, hot (h)
ṭ	,,	,,	t	,, tie (t)	ṉ	,,	,,	almost of ṅ (ŋ)	
ṭh	,,	,,	th	,, anthill (th)	ṃ	,,	,,	,,	m (m)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Bibliography

Original Works on Yoga

(*a*) Manuscripts (unpublished)

Bhavadeva: *Yoga-sāra-saṃgraha.*
Dattātreya: *Dattātreya-saṃhitā.*
Deva, Sundara: *Haṭha-saṃketa-candrikā.*
—— *Haṭha-tattva-kaumudī.*
Gorakṣa: *Gorakṣa-śataka.*
Śiva: *Yoga-bīja.*

Amṛita-siddhi.
Khecarī-vidyā.
Tattva-yoga-bindu.
Yoga-kalpa-latikā.
Yoga-prakriyā.
Yoga-vacana-saṃgraha.

(*b*) *Books*

Dattātreya: *Yoga-rahasya.*
Gheraṇḍa: *Gheraṇḍa-saṃhitā.*
Gorakṣa: *Gorakṣa-saṃhitā.*
Patañjali: *Yoga-sūtra.*
Śiva: *Śiva-saṃhitā.*
Svātmārāma: *Haṭha-dīpikā.*
Vyāsa: *Bhagavadgītā.*
Yājñavalkya: *Yogi-yājñavalkya.*

Other Original Works

Veda.
Atharvaveda.
Ṛigveda.
Sāmaveda.
Yajurveda.

Brāhmaṇa.
Aitareya Brāhmaṇa.
Kauṣītaki Brāhmaṇa.
Śatapatha Brāhmaṇa.

Upaniṣad.
Amṛitanādopaniṣad.
Dhyānabindūpaniṣad.
Śāṇḍilyopaniṣad.
Yogacūḍāmaṇyupaniṣad.
Yogakuṇḍalyupaniṣad.
Yogaśikhopaniṣad.

Itihāsa.
Vyāsa: *Mahābhārata.*

Purāṇa.
Vyāsa: *Agni-purāṇa.*
„ *Bhāgavata-purāṇa.*
„ *Garuḍa-purāṇa.*
„ *Liṅga-purāṇa.*
„ *Mārkaṇḍeya-purāṇa.*
„ *Padma-purāṇa.*
„ *Śiva-purāṇa.*
„ *Skanda-purāṇa.*

Other Selected Works

Alvarez, Walter C.: *An Introduction to Gastroenterology.* 4th Ed. New York, Paul B. Hoeber, Inc., Medical Book Department of Harper and Brothers, 1948.

Burrows, Harold: *Biological Actions of Sex Hormones.* 2nd Ed. Cambridge, The University Press, 1949.

Corner, George W.: *The Hormones in Human Reproduction.* Princeton, Princeton University Press, 1947.

Fulton, John F.: *A Textbook of Physiology.* 16th Ed. Philadelphia and London, S. B. Saunders Company, 1949.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Goldtwait, Joel E., Brown, Lloyd T., Swaim, Loring T., and Kuhns, John G.: *Essentials of Body Mechanics in Health and Disease*. 5th Ed. Philadelphia-London-Montreal, J. B. Lippincott Company, 1952.

Harris, Leslie J.: *Vitamins, a Digest of Current Knowledge*. London, J. and A. Churchill Ltd., 1951.

Hawley, Gertrude: *The Kinesiology of Corrective Exercise*. Philadelphia, Lea and Febiger, 1949.

Johnston, T. B., and Whillis, J.: *Gray's Anatomy, Descriptive and Applied*. 30th Ed. London-New York-Toronto, Longmans, Green & Co., 1949.

Kendall, Henry O., and Kendall, Florence P.: *Muscles, Testing and Function*. Baltimore, The Williams and Wilkins Company, 1949.

Lockhart, R. D.: *Living Anatomy*. London, Faber and Faber Ltd., 1948.

Morehouse, Laurence E., and Miller, Jr., Augustus T.: *Physiology and Exercise*, St. Louis, The C. V. Mosby Company, 1948.

Oakley, Kenneth P., and Muir-Wood, Helen M.: *The Succession of Life through Geological Time*. 2nd Ed. London, British Museum (Natural History), 1949.

Quiring, Daniel P.: *The Head, Neck, and Trunk Muscles and Motor Points*. Philadelphia, Lea and Febiger, 1947.

Prosser, C. Ladd., Bishop, David W., Brown, Jr., Frank A., Jahn, Theodore L., and Wulff, Verner, J.: *Comparative Animal Physiology*. Philadelphia and London, W. B. Saunders Company, 1950.

Robson, J. M.: *Recent Advances in Sex and Reproductive Physiology*. 3rd Ed. London, J. and A. Churchill Ltd., 1949.

Romer, Alfred Sherwood: *Man and the Vertebrates*. 7th Impression. The University of Chicago Press, 1948.

—— *The Vertebrate Body*. Philadelphia and London, W. B. Saunders Company, 1950.

Schneider, Edward C., and Karpovich, Peter V.: *Physiology of Muscular Activity*. 3rd Ed. Philadelphia and London, W. B. Saunders Company, 1948.

Tuner, G. Donnell: *General Endocrinology*. Philadelphia and London, W. B. Saunders Company, 1949.

Wells, Katharine F.: *Kinesiology*. Philadelphia and London, W. B. Saunders Company, 1950.

Wiggers, Carl J.: *Physiology in Health and Disease*. 5th Ed. Philadelphia, Lea and Febiger, 1949.

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Glossary

Asamprajñāta samādhi . Supreme concentration

Āsana . . Posture; posture exercise

Cāraṇā; Cāraṇā-kriyā Contraction (and control) system; contraction exercise

Dhāraṇā . . Elementary concentration

Dhyāna . . Unbroken concentration

Japa . . Repetition of a mantra according to a special process

Kumbhaka . Controlled breath-suspension

Kuṇḍalinī . The Grand Spiritual Potential

Mahābhūta . Non-material subtle energy; "essential"

Mantra . . A particularized form of sound, endowed with the power of awakening conscious radiant energy, residing in it

Mudrā . . Special posture and control exercise

Mūla-mantra . The mantra received in initiation

Nāḍī-śuddhi . The process of harmonization of activating and inhibitory forces as well as energy-acquiring and energy-consuming principles of the body

Nirodha . . The process of elimination of vṛittis

Prāṇa . . The life-principle

Prāṇāyāma . Breath-control; breath-control exercise

Pratyāhāra . Sensory control

Sahita . . A particular form of breath-control

Śakti . . Consciousness in the form of will-energy; consciousness in the form of radiant energy (conscious radiant energy)

Samādhi . . Super-concentration

Samprajñāta samādhi . Super-concentration with super-knowledge

Ṣaṭ-karman . Six purificatory acts

Tanmātra . Non-material subtlest and most concentrated form of energy; "thatness"

Vṛitti . . Moulding of the objective aspect of consciousness into an image

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Index

Anāhata Sound, 43, 44
Āsana (see Posture)
Asceticism, 39

Breath-control,
  development of, 38
  forms of, 41-4
Breath-control, technique of,
  Abdomino-short-quick Breath-act, 191
  Alternate Breath-control with Breath-suspension, 190
  Both-nostrils Breath-control Exercise with Breath-suspension, 190
  Modified Alternate Breath-control Exercise, 190
  Modified Both-nostrils Breath-control Exercise
    with abdomen relaxed, 189
    with abdomen retracted, 190
  Modified Lingual Breath-control Exercise, 190
  Thoracico-short-quick Breath-act, 192

Carbohydrates, 87
Cleansing, technique of,
  Alimentary Canal Auto-air Bath, 100
  Alimentary Canal Auto-lavage, 100
  Colonic Auto-air Bath, 100
  Colonic Auto-lavage, 98
  Easy Method of Alimentary Canal Cleansing, 100
  Enema, 100
  Gastric Auto-lavage, 96
  Gastric Cloth-cleansing, 97
  Nasal Thread-cleansing, 101
  Oesophageal Cleansing, 96
  Oral Cleansing, 96
  Pharyngonasal Water-baths, 101
Colonic Cleanliness, 97, 98
Concentration,
  breathing factor in, 37, 38
  physiological factors in, 51-3
  postures for, 36, 37
  technique of, 196, 197
Contraction,
  forms of, 53, 54
  gradation of, 76-9
Contraction Exercise, 43
Contraction Exercise, technique of,
  Arm-motion, 165
  Lateral Neck Flexion, 132
  Neck Flexion-extension, 131
  Neck Rotation, 131
Control Exercise, technique of,
  Abdomino-retraction Act, 151
  Anal Act, 158
  Anal-lock Act, 159
  Chin-lock Act, 132
  Straight-muscle Act, 152

Dancing, 27, 28
Dhāraṇā, 33
Deva-deha, 51
Diet,
  Fruit, 94
  Milk, 94
  Milk-fruit, 94
  Orange Juice, 95
  Raw, 95
Dietetic Habits, 85, 86
Dhyāna, 34

Efficiency Factor, 51
Endocrine Degeneration, 102
Endurance, 62
Exercise, forms of, 56, 57

Fats, 87
Feminine Beauty, 72
Forced Nutrition, 62
Foods, classification of,
  Acid Fruit Group, 88
  Cereal Group, 89
  Fat Group, 90
  Milk Group, 90
  Non-starchy Vegetable Group, 89
  Nut Group, 90
  Pulse Group, 90
  Starchy Vegetable Group, 89
  Sugar Group, 90
  Sweet Fruit Group, 88

Gazing, technique of, 194-6
Gonadal Wastage, 105
Gotama the Buddha, 67

Haṭha-yoga,
  defined, 40
  development of, 40
Health, 51
Health-level Exercise, 70

Initiation, 197
Internal Cleansing, 42, 43, 45
Internal Contraction, 42

Japa, technique of, 195
Jesus Christ, 67

Khecarī Mudrā, 43
Kumbhaka, forms of, 41-3

Lacto-vegetarian Diet, 70, 86
Laxative Foods, 88
Levitation, 43

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Man,
  psycho-neural aspect of, 27
  speciality of, 28, 64, 67
Mind, analysis of, 32, 33
Mineral Salts, 87
Mohenjo-daro Seals, 37, 40
Motionless Attitude, 51-3
Movements, forms of, 56, 57
Musculature, 26, 27, 56

Nāḍī-śuddhi, 42, 43

Pelvic Control, 45
Physical Education, 28, 51, 64, 67
Posture, 36, 37, 41
Posture, technique of,
  Accomplished Posture, 188
  Adamantine Posture, 109
  Ankle-hold Modified Spine-twist Posture, 126
  Ankle-hold Spine-twist Posture, 129
  Arm Posture, 165
  Arm-head Posture, 154
  Arm-leg Posture, 164
  Arm-stand Posture, 177
  Back Posture, 117
  Back-raise Posture with forearms locked behind head, 112
  Back-raise Posture with hands clasped behind head, 112
  Back-stretch Posture, 118
  Backward-forward Leg-stretch Posture, 158
  Bent-head Adamantine Posture, 116
  Bent-head Wing Posture, 172
  Bent-knee Back Posture, 143
  Bent-knee Inverse Lotus Posture, 149
  Bent-leg Posture, 145
  Boat Posture, 114
  Bow Posture, 113
  Cock Posture, 160
  Corpse Posture, 109
  Crab Posture, 177
  Cuckoo Posture, 115
  Double Food-head Posture, 155
  Eagle Posture, 171
  Ear-pressing Posture, 142
  Feet-extending Thigh Posture, 167
  Fish Posture, 130
  Food-hand Posture, 122
  Forward Body-bend Posture, 121
  Forward Head-bend Posture, 120
  Happy Posture, 157
  Head Posture, 183, 185
  Head-bend Posture, 120
  Head-bend Lotus Posture, 121
  Head-knee Posture, 118
  Head-knee Spine Posture, 146
  Head-stand Posture, 180
  Hip-bend Posture, 123
  Inverse Act, 182
  Inverse Lotus Posture, 185
  Knee-heel Posture, 173
  Knee-touching Spine Posture, 146
  Knee-touching Thigh Posture, 166
  Kneel Posture, 109
  Lateral Spine Posture, 139
  Leg-raise Thigh Posture, 168
  Locust Posture, 112
  Lotus Posture, 187
  Modified Head-stand Posture, 180
  Modified Locust Posture, 113
  Modified Scorpion Posture, 180
  Modified Spine-twist Posture, 125
  Modified Wheel Posture, 117
  Moon Posture, 124
  Mountain Posture, 174
  Neck Posture, 132
  Neck-bridge Posture, 132
  Noose Posture, 157
  Oblique Spine Posture, 137
  Oblique Spine Posture with forearms locked behind head, 139
  Oblique Spine Posture with hands clasped behind head, 138
  One-arm Cock Posture, 161
  One-arm Rolling Posture, 177
  One-leg Pillar Posture, 156
  One-legged Squat Posture, 169
  One-legged Toe Posture, 170
  Opposite Arm-leg Posture, 164
  Peacock Posture, 175, 180
  Pelvis-raise Posture, 153
  Pillar Posture, 157
  Pillow Posture, 147
  Pleasant Posture, 187
  Plough Posture, 141
  Plough Posture with forearms locked behind head, 141
  Prone-lying Posture, 109
  Quadruped Posture, 161
  Raised Bow Posture, 116
  Right-angle Posture, 109
  Risen Back Posture, 143
  Risen Balance Posture, 137
  Risen Leg Posture, 143
  Risen Lotus Posture, 160
  Risen Right-angle Posture, 148
  Rolling Posture, 177
  Scorpion Posture, 178
  Semilunar Posture, 123
  Serpent Posture, 111
  Serpent-king Posture, 115
  Side-lying Posture, 109
  Sideward Feet-extending Thigh Posture, 167
  Sideward Head-bend Posture, 129
  Sideward Leg-motion Posture, 144
  Sideward Leg-stretch Posture, 158
  Single Arm-stand Posture, 180
  Single Foot-head Posture, 154
  Single Foot-head Head-knee Posture, 155
  Shoulder Posture, 183
  Snake Posture, 111
  Spine Posture, 135
  Spine Posture with forearms locked behind head, 136
  Spine Posture with hands clasped behind head, 135
  Spine-twist Posture, 128
  Squat Posture, 109
  Standing Posture, 109
  Standing Head-knee Posture, 172
  Standing Leg-stretch Posture, 174
  Standing Single Foot-head Posture, 174
  Swing Posture, 114
  Thigh Posture, 166
  Three-footed Posture, 162
  Toe Posture, 169
  Toe-hold Lateral Spine Posture, 147
  Toe-hold Lotus Posture, 188
  Twist Posture, 124
  Wheel Posture, 118
  Wing Posture, 172

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Prāṇāyāma (see Breath-control)
Pratyāhāra, 33, 34
Proteins, 87

Relaxation, 54
Relaxation, technique of, 73

Samādhi, forms of, 34, 35
Sensory Control, 33
Sexual Continence, 39
Skill, 27, 62
Specialized Physical Development, 64, 68
Speed, 62
Starting Positions, 109
Strength, 62

Tapasyā, 39
Tonicity, 54

Vitamins, 87, 88
Void-thinking, 195, 196

Yoga,
  defined, 32
  systems of, 35
Yoga Physical Education, aim of, 67, 68

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh